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THE

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THE DEFINITION OF NATIONAL INCOME

The great increase of the share of income taken by the State makes necessary a reconsideration of the methods which were sufficient for the computation of aggregate income when the interest on the National Debt was an inconsiderable percentage of that aggregate.

Statisticians may fairly look to economists for definitions of the terms whose numerical content it is their task to estimate. They might be justified in expecting definitions succinct in wording and logical in concept, and though the field of possible observations would not necessarily coincide with the region so defined, they would then be able to bring their computations into clear relationship with the theoretical definition. Unfortunately it is not at all easy to interpret such definitions as are available in measurable terms.

Marshall speaks of Social Income, for which we are to look at "the production of the community as a whole and at its total net income available for all purposes." This "may be estimated by adding together the incomes of the individuals in the society in question," taking care to avoid duplication of income.[1] Again, "The terms, National Income and National Dividend, are convertible." "The labour and capital of a country, acting on its natural resources, raise annually a joint product consisting of a certain net aggregate of commodities, material and immaterial, including services of all kinds. This is the true net annual income of the country."[2] "This National Dividend is at once the aggregate net product of, and the sole source of payment for, all the agents of production within the country; it is divided up into Earnings of Labour, Interest of Capital, and lastly the Producer's Surplus, or Rent, of land and of other differential

[1] *Principles of Economics*, 1907 Edition, pp. 76 and 79.
[2] *Economics of Industry*, p. 257.

advantages for production. It constitutes the whole of them, and the whole of it is distributed among them. . . ."[1]

We have thus the equation :—

National Dividend = National Income = Earnings, interest and rent = sum of incomes of individuals.

We may notice that these definitions do not explicitly allow for interest payable to residents in one country by those in another, leave open questions of what constitutes membership of a society, and leave no room for indivisible incomes of institutions.

In Mr. Flux's Report on the Census of Production of 1907[2] the left-hand side of this equation was worked out, viz. net output of land, mines and manufacture + services of distribution + personal services + services of houses, and equated with very fair success to the total of individual incomes obtained by other computers.

To suit the statistician the definition is watered down[3] in Marshall's analysis. Omitted on both sides of the equation are free gifts of Nature, use of possessions other than houses, services rendered by members of a household to each other and by individuals to themselves, and so on.

Cannan[4] includes in individual incomes, besides income that comes as money, the annual value of houses, and value of living from farms, but not the value of the annual services of clothes, furniture or motor-cars. Allowance must be made for depreciation of property. The expense of living in a highly rented locality, or paying railway or tram fares to avoid doing so, may be deducted when the expense is necessitated by the person's income-producing work.

Since he wrote, this last consideration has become of more importance. Owing to the shortage of houses many people have to travel considerable distances to work, and the effect of the Rent Restriction Acts has been to keep people where they were, though their place of work has changed. But the matter has been important for a long time; a great part of the local differences of wages was due to rent and other expenses of congestion in towns. Instead of a five-roomed house with a small garden for 6*s*. (including rates) in a provincial town, 10*s*. was paid for three rooms in London and 1*s*. for tram fares; the additional 5*s*. presumably gave him no addition of satisfaction. This is not, however, the final consideration; his services were worth 5*s*.

[1] *Economics of Industry*, p. 258.
[2] Cd. 6320, pp. 30–4.
[3] *Principles*, pp. 76–7.
[4] *Wealth*, Chap. VIII.

more in London, and the aggregate of commodities includes this 5*s*. in the left hand of the equation above; if the equation is true it must also be included in income, but we must add that £1 is not of the same value to consumers in all districts, and that the total on the right hand includes money units not interchangeable and not of uniform purchasing power. The same consideration applies to expenditure on restaurant food and other expenses which the earners of salaries in large towns have to meet.

There are, of course, many other cases where the money values (whether of services or of incomes) are not interchangeable and equal to different persons or in different places. Marshall's definition ("a certain net aggregate of commodities," etc.) does not necessarily imply that there is a numerical measure of this aggregate, but the equation does imply this in "earnings of labour," etc., unless the equation merely identifies the contents without totalling them.

The ignoration of the value of women's domestic services has been less plausible in recent years. During the war the domestic staffs of many houses decreased and well-to-do women rendered more services to their own households. If the housemaid left and made munitions and the housewife did her work, the total of goods and services was increased by the value of the munitions, but part is cut out of the reckoning because no longer paid for. If in 1920 the former servant helped in her own home, when her wages were no longer needed, the total of services is still greater than in 1914 if her former mistress is doing the housemaid's work, but since there is no payment to either income is decreased. Dr. Dalton [1] points out that though services rendered within the households can be omitted for some comparisons, yet in many measurements of the inequality of incomes *proportional* differences are involved, and therefore the complete totals are needed.

In consequence of these and other ways in which elements of income, which were ignored before the war as not affecting comparisons, have become of some importance, I question whether Sir J. Stamp's dictum [2] that "the sum total of wages, salaries, profits and interest presents a fairly comprehensible idea, free from important ambiguities, for ordinary comparative purposes," is valid as between 1914 and 1921.

In logic we can conceive an aggregate of commodities and services however we define them; but when we come to measurement we are driven to their value in exchange before we can obtain a common unit for addition. In recent years the value expressed

[1] *Inequality of Incomes*, p. 168. [2] *British Incomes and Property*, p. 416.

in currency has varied greatly even within a year, as has also the value of one commodity in terms of another. If a farmer sells a fleece when wool is dear, by the time the wool has been cleaned, combed, spun and woven and the cloth made into clothes and exposed for sale, the price of wool may have so fallen, or the effective demand for clothes so slackened, that the clothes are worth fewer currency notes than were paid for the fleece; are the services of the manufacturers and spinners of negative value? If a coal-mine is working at a loss, being financed from reserves or loans, is the capital (the mine in working order) rendering negative services? If the value of currency falls rapidly during the year, is there any useful meaning in a statement that a man's earnings, received weekly, aggregate £260 in a year, when the last £5 was worth only four-fifths of the first £5? In the ordinary method of computing part of income from income-tax statistics and part from wage-estimates, we should for the year 1920–1 be adding together wages, salaries, rent and some interest for the year April 1920 to March 1921 to one-third of the profits of each of the years 1917, 1918 and 1919—items extending over more than four years during which the unit of measurement continually varied.

Again, furniture, bicycles, motor-cars, clothes and all commodities not consumed at a gulp yield an income in the same way as houses do. Owners of a good stock of such things in 1914 got a high income from them in subsequent years, which ought not to be neglected, as before the war, on the ground that the annual variation was little and most persons had some such goods, for those whose stock was low were definitely worse off when it was necessary to replenish it. Of such commodities houses are the most important instance, and have been in a peculiar position owing to the Rent Restriction Acts. If a house was of annual value £50 in 1913 and has been kept in repair, it would be worth not far less than £100 now, apart from any change in supply and demand, in the sense that the goods its use would exchange for are now reckoned at £100 instead of the former £50. The value of houses inhabited by their owners since 1913 and of houses let that come under the Acts should in a total of incomes be counted as of much more than their pre-war value. Actually in available statistics houses still stand at their pre-war levels, and even new houses are assessed for rates at a value equal to that of pre-war houses of the same kind. This house valuation is an extreme case of the complexity already noticed, that income totals can only be measured in units as variable as the values of currency

from 1914 to 1921. This, however, is a statistician's, not an economist's difficulty.

All these questions are troublesome and some are of numerical importance, but the main question, and that of most numerical importance, is still to be discussed :—To what extent do taxation and rates lead to duplicate reckoning?

If the rates I pay go in policemen's or sanitary inspectors' services, I get the benefit of their services, and their incomes are additive to mine before rates are deducted just as much as my gardener's would be. If the rates, however, go to the support of paupers, to the education of other people's children, to the upkeep of parks and libraries I do not use, or in aid of the rent of houses built without my consent, I get no services,—at least no direct services. I might pay for these things out of my free-will, heaping up treasure in heaven: but when I am forced to pay for them, I doubt the realisation of that treasure. I may regard it as ransom, as insurance against discontent; and though Dr. Cannan excludes the proceeds of robbery recognised as such from income, those of robbery not recognised but actually enforced by the State are no doubt income to the beneficiaries, but are they also income to me? Before the war the values of education and of institutional maintenance were not included as income of the students or the inmates, but I raised the question in 1919 whether old age pensions were not income. Now there are pensions of soldiers and others arising from the war; are these incomes both of the pensioner and of the taxpayer? We could, of course, make rules, but they would be arbitrary: *e. g.* old age pensions are not income if we reckon that out-relief and paupers' food are not income; soldiers' pensions are back payments for services, and are income for the same reason as policemen's wages. Thus a man with an apparent income of £1000 may spend £50 as taxes in back payment for the services of soldiers who fought and capitalists who lent money in the war, and £5 for police and other communal servants, and £10 for the relief of distress and for public education. The £50 and the £5 appear also in the incomes of the soldier, his widow, the capitalist, the policeman and the inspector. Of the £10, half appears in the salaries of teachers or of the workhouse staff, the other half does not appear.

Here is introduced the payment of interest on the war loans. If I have a salary of £1000, of which £50 goes in that part of income tax which pays interest on war loans, and I have also war stock that brings in £50 tax-free, my income is reckoned as

£1050, £1000 for present services, £50 for helping to finance the war. But if the Chancellor of the Exchequer by a capital levy cancelled my stock and remitted my tax, my income would be reckoned as only £1000, though I had the same as before. We do not appear to arrive at a logical result by this method; let us then return to the definition.

Under Marshall's definition interest on the National Debt would be excluded from the left hand of the equation—it is not an addition arising from labour and capital acting on natural resources during a year—and so would pensions of most kinds. Then on the other side of his equation in the sum of the incomes of individuals, either they would have to be reckoned as net after payment of the corresponding tax, or pensions and interest on National Debt would be excluded. In the material reckoning the taxpayer does not enjoy the bread the pensioner eats or the motor-car the owner of war stock uses; in the double reckoning it blesses him that gives and him that takes.

At this point let us take Dr. Dalton's view, as a result of his analysis of the Distribution of Income. "For our present purpose" (to facilitate comparisons between the means of economic welfare available to different persons), "no elements of real income can usefully be said to correspond to those elements of money income which the recipient is compelled to pay in taxation to public authorities."[1] If this view is not taken, transference from the rich to the poor by taxation and beneficial expenditure would not be reckoned as diminishing "inequality," as he thinks it essentially should. He would then reckon individuals' incomes as net after all compulsory payments to public authorities were subtracted (including payment of workmen's insurance), and then "include benefits from public expenditure, in so far as they can be estimated, in the income of the beneficiaries." On this method interest on the National Debt is only counted once. Pensioners' incomes are counted to them, whether for old age or war services. Receipts from the National Insurance funds are income to the recipient. Education is an income (? deferred income) to the child. Parks and libraries and streets afford income to those who use them. Dr. Dalton, of course, recognises that much of this income is not measurable; but there is no doubt that he is right in holding that if by taxation or otherwise a rich man's garden becomes a public park, inequality is diminished.

But in making an aggregate statistically we should lose part

[1] *The Inequality of Incomes*, p. 165.

of income by his method—all such items as the income enjoyed by children in school hours, by the populace talking during a band performance in a public park, by the workman sleeping over a newspaper in a public library, by students dozing in the Museum Library. If we take it that the value to recipients of public services equals their cost, and intend to avoid duplication on Dalton's principle, we shall get the result more easily by taking incomes gross (not deducting taxes and rates) and excluding from the total all incomes from public sources. This would exclude not only public pensions and interest on the National Debt, but also the salaries of teachers paid from public sources, policemen, park-keepers, municipal bandsmen; moreover, it would exclude incomes of all Civil Servants, of the king, the judges, in fact the Civil List as a whole—exclude from our total, on the ground that they were included already in the incomes of those who paid them compulsorily. But this would assume that because we must pay for a service whether we wanted it or not, it was therefore valueless to us. A private scavenger renders us a service, a public authority does not, on this reckoning. In a completely socialistic state there would be no aggregate income.

It becomes evident that a statistical account must be made on an arbitrary category of what should be included, and it may happen that such a category will be a near one on the basis of including all that can be measured. Till decision is reached I am in favour of two totals, one containing pensions and debt interest, another excluding them; and I think that we also need two accounts of the distribution of income.

We have still to deal with Professor Cannan, who (p. 157) points out the difficulties that arise in connection with indirect taxation. If two States in the same circumstances raise revenue, one by income tax and the other by indirect taxation, and in the reckoning of Aggregate Income we count out interest from debt and pensions, the income of the former will come out as so much less than that of the latter. For comparison of National Incomes of two countries or at two dates, we ought therefore to include debt interest, etc., unless we are prepared to subtract indirect taxes also.

I do not propose to discuss the incidence of indirect taxation. I believe the usual method is to inquire who would be better off if the taxation did not exist, and though this may lead to a consistent analytical statement as well as to stimulating dialectics, it does not, I think, lead to definitions by which statistical measurements can be made.

If we go back to goods and services we may reach the view that in a State which raises the interest on its debt and its pensions by indirect taxation there is no duplication. To the purchaser of whisky, tobacco and entertainment tickets the goods bought are worth what he pays; it is indifferent to him whether the State or the producer gets the money. In the Report on the Census of Production, the Net Output of Breweries and Distilleries (when the aggregate of the value of goods of all industries is in question) is not merely the excess of value on completion over raw materials, but this plus Excise; and, similarly, to the value of Imports for consumption is added the corresponding Customs. The manufacturer produces goods which not only pay for materials, wages, salaries and profits, but also taxes. In a similar way it might be argued that the provider of a house calls into existence annual services whose value is not only rent but also rates. The workman does not distinguish between rent and rates; he pays 10*s*. a week for shelter and lets the landlord attend to the division between himself and the local authority. Heaven sends the rain and the local authority removes it; he cannot control the one and does not try to control the other. In the Census of Production reckoning, rates on business premises are not deducted in obtaining net output: the value produced by a factory is divisible among the local and central authorities as well as between workers and owners. But in making up the National Income by adding other elements to material production, the value of residential houses is taken as the assessed value, not assessed value + rates; thus the rates on factories are part of output, but those on houses are not.

One way round Dr. Cannan's dilemma would be to correct comparisons of total income by price-indices. This ought to be done in any case. If the natural income of U.S.A. is so many dollars, we can only compare it with that of U.K. if we know the relation between \$ and £. The use of the exchange rate between \$ and £ does not (in present circumstances) give us a valid result. A complete index-number including in due proportion excisable and dutiable goods might yield a true comparison.

We can evade the difficulty by making our totals on the sides of goods and services, not that of individual incomes. National Income is not necessarily the total of individual incomes; it depends on the definitions. But though we escaped one horn of the dilemma in this way, I think we should presently meet the other.

Let us give up the idea of comparing totals, and first get a definition adequate for one total. It is true that statistics are relative, and only useful in comparison; but the comparison can be made between the whole and its parts, or between the whole income and the population, and in such a question as, If we divided up the National Dividend equally among families, how much would each have? From this point of view we want a total of goods and services, and not the total of individual incomes if it is not the same thing.

I doubt whether the "aggregate of individual incomes" has more than a numerical meaning. No doubt we want a definition of individual (and of family) income for consideration of Inequality of Distribution, of how many are rich and how many poor, and the total may enter as a working number if we are constructing an index of distribution. Further, we may make the measurements on net incomes (after subtraction of direct taxes and non-beneficial rates), and (with Dr. Dalton) add to net incomes the receipts from public funds privately enjoyed, and if we like we can introduce hypotheses about the incidence of indirect taxation. But we need not use this method for obtaining National Income.

If we use Marshall's term, Social Income, we may avoid confusion. I suggest that Social Income does not equal the aggregate of Individual Incomes and that the equation above is not true, for the quite simple reason that in Individual Incomes parts of Social Income may be counted twice.

Altering Marshall's phrasing, we may define Social Income tentatively as the aggregate of goods produced in a country (less imported materials used in production) and of services rendered by persons in the country, and by the direct use of capital goods, less goods and services necessary to maintain capital (and trade connections and goodwill), together with goods imported from (or services rendered) abroad in payment of interest or profits on capital or businesses owned by residents of the country, less similar goods and services rendered to owners abroad, all reckoned during a year (or other fixed interval). Services at sea, etc., to be included with home or foreign goods, but not both.

Under this definition services rendered during the war, whether by persons or capital, are not part of current income, though they may be paid to individuals out of it. The services of Civil Servants and police (and of all persons whom individuals or groups engage) are current income.

Goods are either consumed or preserved, services vanish in

their performance; social income therefore equals the total of consumption of goods and services and saving.

Goods cannot be consumed twice. The part of individual income that is also part of social income is receipts of money (goods and services) less transfers to other people. To compute social income we must therefore either take individual incomes net after compulsory deductions, and include incomes of pensioners, holders of National Debt, etc., or take individual incomes net after subtracting receipts from funds obtained by compulsory deductions, and include all incomes.

When we come to valuation of income, we have to decide the question of rates and indirect taxes. I incline to the view that the value of goods is that when they are bought, after licenses and duties have been paid. Also the value of a house cannot depend on ownership, and what I have called the workman's view, that its value is rent + rates, is correct. If I own the house I live in, its value is that for which I could let it to a person with similar needs and tastes rate free. These points come up finally if we interpret £100 sterling in terms of goods, and if the method of index-numbers could be stretched to include all purchases, comparisons between countries and dates could be made.

Social income then = consumption and saving in a year = aggregate of individuals' incomes (as ordinarily reckoned, say, for income tax), less incomes received from compulsory reductions for no services or for services not rendered in the year in question (old age pensions, soldiers' pensions, interest on National Debt).

I do not offer this as a final definition, but as the result of a preliminary examination of the question, a question which hitherto has neither deserved nor received very much attention because the quantities in doubt were hitherto small in relation to the aggregate, and the measurement of the aggregate was subject to other errors greater than these quantities.

There is plenty of time to decide the definition before we shall again be able to compute the National Income. Income tax statistics will not be of use till values have settled, and the changes during the four years averaged are slight; wage statistics cannot be used till workmen are again at work at stable wages. Intermediate income must be estimated afresh in the doubtful light of the 1921 Census, and will need a new investigation.

The most hopeful method will be, I think, a new Census of Production, taken in the first year of steady trade at steady values, with more definite investigation of the cost of distribution and the expense of depreciation.

Possibly three years hence there may be material for making a measurement the precision of which will be comparable with those made before the War. Meanwhile we can only say that there are strong *a priori* reasons for holding that the National Income, even if every one was at work, defined so as to be free of duplication, would be less than in 1913, when the change in purchasing power of currency is eliminated.

A. L. Bowley

THE ALLEGED EXHAUSTION OF THE SOIL IN MEDIEVAL ENGLAND

In Denton's posthumous volume on *England in the Fifteenth Century*, which was published in 1888, it is suggested that the agrarian changes of the sixteenth century were, at least in part, due to the exhaustion of the soil.[1] This theory has since been developed, and in the hands of its latest exponents has received a more uncompromising form. It is the basis of an interesting article by Dr. V. G. Simkhovitch of Columbia University,[2] and has been made the subject of an important monograph by Dr. Harriett Bradley of Vassar College.[3] More recently Lord Ernle has popularised it in two articles published in the *Journal of the Ministry of Agriculture*.[4]

A few quotations will suffice to show the exact nature of the theory as it appears in the writings of its most recent champions. "The enclosure movement," says Dr. Bradley, "is explained not by a change in the price of wool, but by the gradual loss of productivity of common-field land." [5] Lord Ernle asserts that the worst feature of the open-field system was "the inevitable and progressive decline in the productivity of the soil." "Strong evidence exists," he says, "to show that in the four-

[1] W. Denton: *England in the Fifteenth Century* (1888). "It was clear at the end of the fifteenth century that the fertility of the arable land of England was well-nigh exhausted" (p. 153). "The returns of wheat and other grain were inconsiderable, and even this was diminishing. The demand for labour in the commercial and manufacturing towns—small as these towns were—forced up the wages of agricultural labourers beyond the means of the farmers. It was this which compelled them to lay down their lands in grass, and to turn their attention to sheep-farming. . . . Much present misery was the consequence. It is well, however, that necessity should have forced on the change. On every side the old arable fields were being converted into sheep pastures, and grazing became the chief occupation of our agriculturists during most part of the sixteenth century. Then the ground had the rest it needed" (pp. 153–4).

[2] V. G. Simkhovitch: "Hay and History" in the *Political Science Quarterly*, XXVIII (1913).

[3] Harriett Bradley: "The Enclosures in England: An Economic Reconstruction" (*Columbia Studies in History, Economics and Public Law*, Vol. LXXX, No. 2, 1918).

[4] Lord Ernle: "The Enclosure of Open-field Farms" in the *Journal of the Ministry of Agriculture* for December 1920 and January 1921.

[5] *Op. cit.*, p. 13.

teenth and fifteenth centuries the arable land, continuously cropped for corn for several hundred years, was losing its fertility. The yield was falling. Land which had produced a livelihood for a man and his family ceased to supply his necessary food. Portions were being abandoned as tillage."[1] His second article contains the following passage:—

"Reliable statistics are not available on so extensive a scale as to demonstrate in conclusive fashion the degree to which the yield had declined. But such figures as can safely be used seem to show that, even on demesne lands, the produce of wheat per acre had fallen from the neighbourhood of 10 bushels in the thirteenth century to between 6 and 7 bushels in the fifteenth century."[2]

I venture to think that the available evidence does not support the view of medieval agricultural history which is implied in these quotations. There is, of course, no doubt that the systems of cultivation which were in use during the Middle Ages produced wretched crops and involved great waste of land through frequent bare fallowing, and personally I certainly consider that enclosure was necessary to agricultural progress. But it seems to me more than doubtful whether the defects of medieval agriculture included progressive exhaustion of the soil.

One's suspicions are aroused at the outset by certain inaccuracies and disagreements in the writings of those who advocate the theory of soil exhaustion and by the inadequate and unscientific nature of the evidence which is advanced to prove it. Dr. Simkhovitch, for example, speaks of the soil as being already exhausted in the thirteenth century, and quotes thirteenth-century wheat yields of 4·3 bushels and 5 bushels an acre.[3] Lord Ernle, on the other hand, postulates a 10-bushel yield for the thirteenth century and argues for a progressive decline in yield in the two following centuries. In a footnote appended to the sentence in which he speaks of "such figures as can safely be used," Lord Ernle says: "The yield in 1397 was on the Winchester land 6 bushels, and on the Whitney land 6¼ bushels, to the acre. The thirteenth century work on agriculture, known as Walter of Henley's *Husbandry*, calculates the expected yield of wheat per acre at 10 bushels."[4] As a matter of fact Walter of Henley is not the author of the estimate which is here attributed to him. The only remarks which Walter of Henley makes about the yield of corn are to the effect that a

[1] *Op. cit.*, p. 838.
[2] *Op. cit.*, p. 809.
[3] *Op. cit.*, p. 394 and footnote.
[4] *Op. cit.*, p. 899.

crop of *six* bushels of wheat per acre will involve a loss "unless corn sells well."[1] Apparently Lord Ernle has confused Walter of Henley's *Le Dite de Hosebondrie* with the anonymous tract called *Hosebonderie*, which is bound up with Lamond's edition of Walter of Henley. It is true that this anonymous *Hosebonderie* is at least as old as the thirteenth century, that it says "wheat ought by right to yield to the fifth grain," and that it estimates the seed at from 2 to $2\frac{1}{3}$ bushels per acre. This means a crop of from 10 to 12 bushels an acre. But it is important to notice that such a crop is only what wheat "*ought by right to yield*" according to an advanced agricultural writer, and that the author of the *Hosebonderie* goes on to speak of the chance of either the spring or the winter sowing being a failure and says definitely "one cannot be sure of the yield above mentioned." He even alludes to the possibility of the crop being less than the seed sown.[2] There is really very little reason for supposing that he regarded 10 bushels as an average crop. In any case it is surely very unscientific to make a comparison between a thirteenth-century *estimate* and two crop records of the year 1397 the basis of a sweeping generalisation about the *yield of wheat having fallen from about 10 bushels in the thirteenth* century to between 6 and 7 bushels in the *fifteenth* century. It would perhaps be if anything more to the point to compare the thirteenth-century statement that wheat "ought by right to yield to the fifth grain" with the assumption of Thomas Tusser (in the edition of 1577) that *one-tenth* of the corn grown should suffice for seed.[3] Besides, the use which Lord Ernle makes of

[1] *Walter of Henley's Husbandry*, edited by Elizabeth Lamond (1890), pp. 18–19. Simkhovitch remarks that Walter of Henley "shows a distinct tendency to exaggerate rather than to underestimate." *Op. cit.*, p. 394. Maitland says "he represents the 'high farming' of his time, and in his two-course husbandry would plough the land thrice over between every two crops." F. W. Maitland: *Domesday Book and Beyond*, 1907, p. 438.

[2] *Walter of Henley's Husbandry* (edited Lamond), pp. 66–7, 70–1.

[3] Thomas Tusser: *Five Hundred Pointes of Good Husbandrie* (English Dialect Society, 1878), pp. 136–7. William Harrison (1577) seems to confirm Tusser. He says: "The yeeld of our corne-ground is also much after this rate folowing. Through out the land (if you please to make an estimat thereof by the acre) in meane and indifferent yeares, wherein each acre of [rie or] wheat, well tilled and dressed, will yeeld commonlie [sixteene or] twentie bushels, an acre of barlie six [? two] and thirtie bushels, of otes and such like [foure or] five quarters, which proportion is notwithstanding oft abated toward the north, as it is oftentimes surmounted in the south." (*Harrison's Description of England*, edited by F. J. Furnivall, New Shakspere Society, Series VI, Part III. The Supplement, § 1, pp. 133-4.) I do not maintain that these estimates are trustworthy, but only that it is more scientific to compare estimates with estimates and crop records with their like. It is, of course, a far cry from the last quarter of the sixteenth century back to the fifteenth century.

the figures of the year 1397 is also open to criticism. To begin with, the two figures are not independent data. The Witney crop is included in the average figure for the demesnes of the Bishop of Winchester.[1] Secondly, it is surprising that Lord Ernle chooses to compare these fourteenth-century figures with the estimate of the *Hosebonderie* rather than with the earlier figures for the same lands which are given in Dr. Bradley's book. It would have been more pertinent to notice that the average wheat crop on the Winchester demesnes was only $4\frac{1}{3}$ bushels in the year 1208–9, and that at Witney it was only $3\frac{2}{3}$ bushels in that year.[2] Lastly, neither Lord Ernle nor Dr. Bradley seems to be aware of the hypothetical character of these crop records. The figures are obtained by the process of dividing the total amount of produce by the number of acres sown *in the following season, not in the preceding seedtime,* and are therefore only true on the hypothesis that the acreage under wheat was not altered.[3] This fact adds importance to the omission of crops other than wheat from the statistics on which the arguments I am criticising are based.

Of course a theory may be sound though the arguments advanced by its champions are faulty, and I pass to a more general examination of the evidence which bears upon the whole question. The best medieval crop records are derived from a comparison of the seed sown in one year with the crop harvested in the next. Such a comparison eliminates the uncertainties which are produced by local differences in corn measures and in the size of the acre. But except in cases where the comparison was made in the minister's accounts themselves, as occurred at Forncett in Norfolk between 1290 and 1306,[4] this method of investigation can only be employed when accounts are available for two or more consecutive years. And though no doubt a considerable number of such accounts would be forthcoming if one had time to embark upon the limitless sea of manorial manuscripts, only a few seem to be available in print. In a good many published statistics the figures are given without any

[1] " Whitney " is clearly a misprint for Witney.

[2] Bradley : *op. cit.*, p. 52.

[3] This is frankly recognised in Mr. Hall's edition of the *Winchester Pipe Roll*, from which the figures for 1208–9 are obtained ; see Hubert Hall : *The Pipe Roll of the Bishopric of Winchester, 1208–9* 1903), p. xxvi. Dr. Gras also calls attention to the dependence of the Winchester statistics upon this hypothesis; see N. S. B. Gras : *The Evolution of the English Corn Market*, 1915, p. 216, footnote.

[4] F. G. Davenport : *The Economic Development of a Norfolk Manor*, 1906, p. 29, footnote.

indication whether they are obtained by the more exact method described above or are based, like those of the Bishop of Winchester's demesnes, upon the hypothesis that the area sown in the year covered by the account was approximately the same as that sown in the preceding year. In the following summary of the evidence which I have come across I shall indicate which figures are "exact."

It will be best perhaps to start by collecting the data century by century, in order to see whether the figures seem on the face of them to support the theory of progressive soil exhaustion :—

Place.	Year.	Ratio produce to seed.
A. WHEAT.		
Wootton (Oxon) [1]	1278	3
Forncett (Norfolk) [2]	1290	5 (+ 1½ bush.)
	1293	4½ (+ 3½ bush.)
	1300	5 (– 2 qrs. 7 bush.)
Wistowe (Huntingdon) [3]	1298	1¾ (+ 8½ bush.)
B. OATS.		
Wootton (Oxon) [1]	1278	2⅜
Basingstoke (Hants) [4]	1281	2¼ (— 4 bush.)
Forncett (Norfolk) [2]	1290	3 (— 1 bush.)
	1293	4 (— 6 qrs. 7 bush.)
	1300	3 (+ 5 qrs. 7 bush.)
C. BARLEY.		
Wootton (Oxon) [1]	1278	2¾
Basingstoke (Hants) [4]	1281	4¾ (— 4½ bush.)
Forncett (Norfolk) [5]	1280	Less than 2½
	1290	4 (+ 6 qrs. 3 bush.)
	1293	3½ (+ 3 qrs. 4½ bush.)
	1300	4½ (+ 5½ qrs.)
Wistowe (Huntingdon) [3]	1298	2¾ (— 1 qr. 2¼ bush.)
D. PEAS.		
Forncett (Norfolk) [6]	1290	3 (+ 2 qrs. 2½ bush.)
	1293	3½ (— 4 bush.)
	1300	6 (– 2 qrs. 7½ bush.)

[1] Adolphus Ballard: "Woodstock Manor in the Thirteenth Century" (*Vierteljahrschrift für Social- und Wirtschaftsgeschichte*, VI, 1908). I am not certain that Ballard obtained his figures by the "exact" method, though many of the accounts he used were for consecutive years, but at Wootton the areas sown with wheat, barley and oats were almost the same in 1277 as in 1278.

[2] F. G. Davenport: *op. cit.*, p. 30, footnote.

[3] N. Neilson: *Economic Conditions on the Manors of Ramsay Abbey*, 1898. The Wistowe accounts are printed in full. I have assumed that Rogers is right in thinking that the "ring" of these accounts, like the coomb of the Eastern Counties, was 4 bushels. This seems almost certain on internal evidence, and it would not affect the ratio much if it were not.

[4] F. J. Baigent and J. E. Millard: *A History of Basingstoke*, 1889, pp. 633, 636. The interpretation of some of the Basingstoke figures is not free from doubt. I have taken the alternative least favourable to my argument.

[5] F. G. Davenport: *op. cit.*, p. 29.

[6] *ib.* p. 31.

1. *The Thirteenth Century.*—In considering the thirteenth-century evidence, it will be well to bear in mind the expectations of the author of the *Hosebonderie*, since Lord Ernle makes his statements about the yield of wheat the foundation of a sweeping generalisation. The author of the *Hosebonderie* says that wheat ought to yield to the fifth grain, oats to the fourth, barley to the eighth, and beans and peas to the sixth.[1] Now the "exact" crop records of the century which I have come across are as in the preceding table (page 16).

It will be noticed that except the Forncett wheat crops and except the Forncett oat crop of 1293 and the pea crop of 1300, all these yields were considerably lower than those expected by the author of the *Hosebonderie*. Probably the crops ought to be increased by one-ninth to allow for the deduction of tithe before the grain was carried to the barn. An allowance for tithe would, however, make but little difference to the yield figures: at Wootton, for example, it would raise the figure for wheat from 3 to $3\frac{1}{3}$. For purposes of rough comparison with the statistics of the next century it may be allowable to take an unweighted average of the yields, ignoring the odd quarters and bushels. This process gives us less than four-fold as the yield of wheat, less than three-fold as the yield of oats, less than four-fold as the yield of barley and rather more than four-fold as that of peas—the exact figures being: Wheat, $3\frac{17}{20}$; Oats $2\frac{37}{40}$; Barley (if we take the yield of 1280 as $2\frac{1}{2}$), $3\frac{15}{28}$; Peas, $4\frac{1}{6}$. The question, of course, arises whether the years to which these figures belong were normal or exceptional years, and perhaps the best test of this is to be found in Rogers' average prices, for we should expect prices to range high after a scanty harvest and low after one that was abundant. Unfortunately, the books from which I have obtained these figures do not, as a rule, make it clear whether the date given is the year of the harvest or the year in which the account was compiled, that is, the year following the harvest whose yield is recorded in the account. But whether, in these uncertain cases, we take the prices of the years given in the table or those of the following years, the averages work out for wheat at something between 6 per cent. and 7 per cent. above the average of Rogers' decennial average prices for the period. For oats the figures are in both cases slightly below the average of the decennial averages, while for barley they exceed that average by about $1\frac{3}{4}$ per cent. in the one case and less than 6 per cent. in the other. The corresponding figures for peas

[1] *Walter of Henley's Husbandry* (edited Lamond), pp. 70–1.

are less than 1¾ per cent. above the average if we take the years given in the table, but nearly 20 per cent. above it if we take the following years. Thus it appears that on the whole the years to which these crop records refer were not untypical of the last three decades of the thirteenth century. Only as regards peas does there seem any likelihood of their being years of abnormally low yield.

For further information about thirteenth-century crops we must turn to figures obtained by the "hypothetical" method mentioned above, and certain other figures as to which I am uncertain whether they were obtained by the "exact" method or not. The following table gives for the principal crops such figures coming within these two classes as I have been able to collect :—

Year.	Places.	Bushels per acre.	
1209	Demesnes of Bp. of Winchester [1]	7½	8¼
1243	Bladon (Oxon) [2]	8½	4
	Combe (Oxon)	3½	4½
	Handborough (Oxon)	5½	5
	Wootton (Oxon)	3¾	7¼
1244	Bladon		12¾
,,	Combe	?	4¾
,,	Handborough	16	9½
,,	Wootton	10	9
1245	Bladon	10¼	7
,,	Combe	7	6
,,	Handborough	10½	9¾
,,	Wootton	9½	11½
1246	Bladon	7¾	8½
,,	Combe	8	7
,,	Handborough	9½	8½
,,	Wootton	6	8½
1247	Bladon	9½	6¾
	Combe	10¼	8
	Handborough	7¾	8¼
	Wootton	9¾	10½
1248	Bladon	9¼	8
	Combo	6	6½
	Handborough	8	11

Year.	Places.	Bushels per acre.		
1248	Wooton		9½	7½
	Crondal (Hants) [3]		20½	11¼
,,	Sutton (Hants ?) [4]	6¼	16¼	13¾
1249	Bladon	6	10¼	5½
	Combe	3¾	7¼	11
	Handborough	1½	7¾	7½
	Wootton	3	10	4½
1263	Bladon	4	5	4
1277	Combe	4½	11¼	9
	Wootton		6¼	8
	Witney (Oxon) [5]		15½	10½
278	Combe		4½	6
282	Handborough	4½	11	
283	Handborough	5½	9	
,,	Witney	8½	12	16¼
284	Witney	10½	20	11¾
285	Witney	7¼	16	10¼
289	Combe	7½	17	7½
,,	Wootton	5½	7½	7
1294	Combe		11	12
,,	Wootton		11	8
1300	Demesnes of Bp. of Winchester [6]		10¾	8¼

[1] Hubert Hall : *op. cit.*, pp. xvi, xliv, xlv. These estates were in the south of England and mainly in Hampshire, the areas being 6838 acres (wheat), 1860½ acres (barley), 7317 acres (oats), and the yield (compared with the seed sown for the following season) 2⅓ for wheat, 2½ for barley and 2¼ for oats.

[2] All the Bladon, Combe, Handborough and Wootton figures are from A. Ballard : *op. cit.*, p. 459.

[3] F. J. Baigent : *The Crondal Records* (Hampshire Record Society, 1891), Part I, pp. 57–8, 67–8. The *yield* was 5 for barley 3 for oats.

[4] *Ibid.*, pp. 78, 81–2. Yield, wheat 3½, barley 4¾, oats 4.

[5] The Witney figures are from Ballard's chapter in A. E. Levett and A. Ballard : *The Black Death on the Estates of the See of Winchester* (Oxford : *Studies in Social and Legal History*, Vol. V, 1916), p. 203.

[6] N. S. B. Gras : *op. cit.*, pp. 263–4. The area was 3353 acres of wheat, 1170½ acres of barley and 3665 acres of oats, and the *yields* (based upon a somewhat larger area) were : wheat 4, barley 3, oats 2. I have avoided the error which Dr. Bradley has pointed out in Gras's totals. Bradley : *op. cit.*, p. 53.

Many of the figures in this table, and perhaps all of them, depend upon the hypothesis that the area under a given crop was not changed in the seedtime following the harvest to which the crop record refers, but this defect also applies to the figures on which Dr. Bradley and Lord Ernle rely, as does also the uncertainty which attaches to all figures based on acreages because of local varieties in the size of the acre. The author of the *Hosebonderie* says that "acres are not all of one measure," and mentions acres measured by perches of from 16 to 24 feet, and Ballard, in connection with the figures for Bladon, Combe, Handborough, and Wootton, which are included in the table, remarks that "the strips which were called acres, were probably less than 160 poles in extent," and that "the old maps of Oxfordshire, published by the Clarendon Press, show that the customary acre in this county varied from 90 to 120 poles." [1] On the other hand, we read in the *Hosebonderie* that "one can in many places reasonably sow four acres with a quarter of seed, where the land is measured by the perch of sixteen feet and a half," and that "in many places it requires a quarter and a half to sow five acres with wheat, rye, and beans and peas, and two acres with a quarter of barley and oats"; [2] and Ballard tells us that at Wootton and Combe "it was customary to sow 2 bushels each of wheat, barley and peas, and 4 bushels of oats to the acre," and that "the seed sown at Witney was $2\frac{1}{2}$ bushels of wheat to the acre, and 4 bushels each of barley and oats." [3]—figures which seem to suggest that on these manors the acre did not differ much from the statutory acre. The deduction of tithe is another factor to be remembered.

Taking the figures in the table as they stand, one notices that, of the 45 wheat yields, only 1 (that of 1284 at Witney) reached the figure which the author of the *Hosebonderie* expected and which Lord Ernle considers was the usual yield in the thirteenth century, though an allowance for tithe would bring one other instance (the Winchester demesnes in 1300) up to this standard.[4] Even if one allows for tithe deduction, it appears

[1] A. Ballard: *op. cit.*, p. 450.

[2] *Walter of Henley's Husbandry* (edited Lamond), pp. 66–7.

[3] A. Ballard: *op. cit.*, p. 448, and A. E. Levett and A. Ballard: *op. cit.*, p. 192.

[4] The fact that these were ecclesiastical estates does not affect their liability to pay tithe. I am informed by Prof. E. W. Watson that lands which the Bishop of Winchester held as part of the temporalities of the see would pay tithe just as if the land was held by a layman. Monastic lands also paid tithe as a rule, though the Cistercians were exempt on land which they owned *and farmed*, and the military orders also had special privileges in this respect. Land which had once belonged to the privileged orders might continue to be exempt after it had passed into other hands.

that no less than 26 of the wheat crops were less than the 6-bushel standard which Lord Ernle takes as marking the reduced yield of the fifteenth century. As regards barley the figures are even more striking. The author of the *Hosebonderie* expected 32 bushels per acre, and the heaviest crops in the table are one of $20\frac{1}{2}$ bushels at Crondal in Hampshire (1248) and another of 20 bushels at Witney (1284). Even if we assume that the sowing was in every case as light as it was at Wootton and Combe, the ratio of crop to seed must have been less than half that mentioned in the *Hosebonderie* in 9 cases and can only have come up to it in 7. Of the oat crops, only 1 reached the standard of the *Hosebonderie* (16 bushels), and in 15 instances out of the 46 the crop was less than half that standard. In drawing these conclusions I have made allowance for tithe deduction.

But the general implication of the figures can best be shown by an average; and, in order to diminish the influence of possibly exceptional seasons, I have taken an average for each year for which the table contains statistics (adding one-ninth for tithe) and then have taken an average of the resulting figures. The result gives the following average yields for the 18 seasons (of which it should be noticed that 8 belong to the first half and 10 to the second half of the century): Wheat, between $6\frac{1}{4}$ and $6\frac{1}{2}$ bushels per acre; Barley, between $11\frac{1}{4}$ and $11\frac{1}{2}$ bushels; Oats, between $9\frac{1}{4}$ and $9\frac{1}{2}$ bushels.[1]

2. *The Fourteenth Century.*—The fourteenth century data, like those of the thirteenth century, had best be divided into two groups according to the method by which the resultant figures have been calculated. And first I shall consider crop records which have been obtained by the "exact" method—

[1] Since the tables for the thirteenth century were compiled I have noticed that some additional figures can be obtained by the "hypothetical" method from the *Forncett Account Roll* of 1273 which is printed in Appendix VIII of Miss Davenport's *Economic Development of a Norfolk Manor.* The figures are as follows:—

Wheat, nearly 12 bushels an acre.	Ratio of produce to seed, $5\frac{1}{4}$.
Barley, nearly 13 bushels an acre.	Ratio of produce to seed, $2\frac{3}{4}$.
Oats, $18\frac{1}{2}$ bushels an acre.	Ratio of produce to seed, $4\frac{1}{4}$.
Peas, 9 bushels an acre.	Ratio of produce to seed, 4.

These crops are heavy for the period (especially as there was some *curallum* or small corn of wheat and barley which I have not counted), and their inclusion in the table would tend to raise the average figures. But it appears from the figures in the first table given above that the Forncett wheat yields were exceptionally good, and it is certain that in the Middle Ages the districts most suited to a particular crop must have had less influence in raising the national average than they have to-day. Lack of transport and the prevalence of subsistence farming meant that there was little specialisation of districts in the crops to which they were best suited by soil and climate.

that is to say, by a comparison of the seed sown with the produce garnered in the following harvest. The figures are given in the next table :—

Place.	Year.	Total seed.	Total crop.	Ratio of produce to seed.
A. Wheat.				
Forncett (Norfolk) [1]	1303			5½ (+ 2 qrs. 6½ bush.)
" "	1306			5 (– 4 bush.)
Ten Manors of Merton College, Oxford, in six Southern and Midland Counties [2]	1334	165 qrs. 6 bush.	715 qrs. 5½ bush.	4¼ (+ 11 qrs. 2 bush.)
Eleven Manors of Merton College in seven Southern and Midland Counties	1335	154 qrs. 0 bush. 2½ pecks	727 qrs. 2 bush.	4¾ (– 4 qrs. 5 bush.)
Eleven Manors of Merton College in seven Southern and Midland Counties	1336	148 qrs. 3¼ bush.	599 qrs. 2¼ bush.	4 (+ 5 qrs. 5¼ bush.)
Hawsted (Suffolk) [3]	1388	16 qrs. 4 bush.	69 qrs. 2 bush.	4¼ (– 7 bush.)
B. Oats.				
Forncett (Norfolk)	1303			3½ (+ 3½ bush.)
	1304			3½ (+ 3 qrs. 3½ bush.)
	1306			3 (– 3 qrs. 5 bush.)
Seven Manors of Merton College in five Southern and Midland Counties	1334	158 qrs. 4 bush.	429 qrs. 7½ bush.	2¾ (– 5 qrs. 7½ bush.)
Eight Manors of Merton College in six Southern and Midland Counties	1335	161 qrs. 2 bush.	498 qrs. 4 bush.	3 (+ 14 qrs. 6 bush.)
Seven Manors of Merton College in five Southern and Midland Counties	1336	154 qrs. 6½ bush.	414 qrs. 6 bush.	2¾ (– 10 qrs. 7¾ bush.)
Hawsted (Suffolk)	1388	19 qrs. 3 bush.	40 qrs. 4 bush.	2 (+ 1 qr. 6 bush.)
C. Barley.				
Forncett (Norfolk)				3 (+ 1 qr. 5 bush. 3 pecks)
	1304			4 (+ 3 qrs. 1½ bush.)
	1306			4 (– 2 qrs. 5 bush.)
Eight Manors of Merton College in five Southern and South Midland Counties	1334	97 qrs. 4½ bush.	387 qrs. 2¾ bush.	4 (– 2 qrs. 7¼ bush.)
Eight Manors of Merton College in five Southern and South Midland Counties	1335	89 qrs. 2 bush.	388 qrs. 2⅜ bush.	4¼ (+ 9 qrs.)
Seven Manors of Merton College in five Southern and South Midland Counties	1336	92 qrs. 0 bush.	421 qrs. 2½ bush.	4½ (+ 7 qrs. 2½ bush.)
Hawsted (Suffolk)	1388	13 qrs. 0 bush.	52 qrs. 2 bush.	4 (+ 2 bush.)
D. Peas.				
Forncett (Norfolk)	1303			4 (+ 1 qr. 2 bush.)
	1304			4 (+ 3 qrs. 1½ bush.)
	1306			2 (– 1 qr.)
Seven Manors of Merton College in five Midland and South Southern Counties	1334	12 qrs. 6¼ bush.	83 qrs. 1 bush.	6½ (+ ¾ bush.)
Seven Manors of Merton College in six Southern and Midland Counties	1335	28 qrs. 3½ bush.	125 qrs. 1¾ bush.	4½ (– 2 qrs. 6 bush.)
Seven Manors of Merton College in six Southern and Midland Counties	1336	21 qrs. 6¼ bush.	79 qrs. 5¼ bush.	3⅝ (– 2 qrs. 0$\frac{3}{8}$ bush.)

[1] All the Forncett figures come from F. G. Davenport : *op. cit.*, pp. 29–31.

[2] The figures for the Merton College manors are calculated from the tables in J. E. Thorold Rogers : *A History of Agriculture and Prices*, Vol. I (1866), pp. 38–45.

[3] The figures for Hawsted come from Sir John Cullum : *History and Antiquities of Hawsted and Hardwick in the County of Suffolk* (2nd edition, 1813), pp. 215–19.

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The statistics in the above table yield the following figures as the (unweighted) averages of the yields shown in the fifth column: Wheat, $4\frac{5}{8}$; Oats, $2\frac{13}{14}$; Barley, $3\frac{27}{28}$; Peas, $4\frac{1}{8}$. It will be noticed that the figure for wheat is considerably larger, and that the figures for oats and barley are slightly larger than the corresponding figures for the thirteenth century. Peas show a slight decline.

The test of Rogers' prices seems to indicate that the seasons to which these crop records belong were on an average rather more abundant, except perhaps in the case of oats, than were the various decades to which they belong taken together. But the most notable sign of the seasons being super-normal is the fact that the average price of wheat for the various years taken together was nearly 12 per cent. below the average of the decennial average prices for the decades to which those years belong, and this difference depends on the assumption that the dates of the Forncett figures are the dates of the rolls, not the dates of the harvests. If we assume the contrary, the difference in price is reduced to less than 2 per cent. On the whole the evidence does not seem to me to suggest that the years of the crop records were sufficiently abnormal to invalidate the comparison made above between these records and those of the preceding century.[1]

The table on page 23 gives fourteenth-century figures which have been obtained by the "hypothetical" method mentioned above, or as to which I am uncertain whether they are "exact" or "hypothetical."

A comparison of this table with the corresponding table for the thirteenth century shows (i) that in 4 cases the wheat crop, in 6 cases the barley crop, and in 1 case the oat crop was heavier than the heaviest crop of the kind in the thirteenth-century table; (ii) that only in 15 instances out of 35 was the wheat crop less than 6 bushels, whereas of the 45 wheat crop records of the earlier table no less than 31 failed to reach that figure; (iii) that, as regards barley, 12 crops out of 36 were under 10 bushels in the later period as compared with 26 crops out of 45 in the thirteenth century; but (iv) that in the case

[1] Besides the statistics given in the table, "exact" figures are also available from Hawsted on an acreage basis for the harvest of 1390. They are: Wheat, nearly 6 bushels an acre; Barley, $12\frac{3}{4}$ bushels; Oats, nearly 5 bushels; Peas, $12\frac{1}{2}$ bushels. The fact that the price of wheat in 1391 was, according to Rogers, 5*s.* $5\frac{1}{4}$*d.*, while the average prices were 5*s.* 2*d.* for the decade 1381–90 and 5*s.* 3*d.* for the decade 1391–1400, seems to suggest that the harvest of 1390 was somewhat scanty. In 1388, however, the crop of peas at Hawsted was less than $7\frac{1}{2}$ bushels an acre.

of oats 18 crops out of 34 fell short of an 8-bushel standard in the fourteenth century as compared with 20 crops out of 46 in the earlier period. In making these comparisons I have taken no account of tithe deduction. In order, however, to obtain average figures comparable with those which were calculated from the corresponding table for the thirteenth century, I have added one-ninth for tithe, taken an average for each year for which there are figures, and then have taken an average of the resulting figures. The following is the result: Wheat, between 7½ and 7¾; Barley, between 15¼ and 15½; Oats, between 8½ and 8¾ bushels. As compared with the corresponding thirteenth-century figures

		Bushels per acre.					Bushels per acre		
	Place				Year.	Place.			
1305	Combe (Oxon)[1]	3½	3¾	7	1348	Witney	6¾	21¼	10¾
,,	Wootton (Oxon)	4	5	5		Brightwell	—	25	10½
1306	Combe	4½	3	7		Downton	3¾	10¼	16
,,	Wootton	5	5½	3¾	1349	Witney	4¾	8	6½
1307	Combe	6½	6	6	,,	Downton	3¼	7½	8¼
,,	Wootton	4¾	8	4¼	1350	Witney	5¼	10	6
1316	Cuxham (Oxon)[2]	7¼	6¼	?		Brightwell	9¼	18½	4
1333	Eight Manors of Merton College in five Southern and South Midland Counties[3]	11	20½	12		Downton	9¾	16	7¾
						Witney	6¼	11¾	11¼
						Brightwell	8½	20¼	—
						Downton	4½	13	9½
1340	Witney (Oxon)[4]	5½	15¾	7¼	1352	Witney	8½	7½	4¾
1341	Witney	7½	20¼	8¾	,,	Brightwell	8½		2½
1342	Witney	6	18	6	,,	Downton	14	8¼	0
1346	Witney	5¼	19¼	17	1353	Witney	5	8½	8
	Brightwell (Berks)	10¾	25½	5¼	,,	Brightwell	13½	20¾	2½
	Downton (Wilts)	5¼	14	8½	,,	Downton	7	12	5
	Witney	6½	20¾	8	1387	Hawsted (Suffolk)[5]	8½	16¾	8½
	Brightwell	6¼	28	5½	1307	Demesnes of the Bp. of Winchester[6]	6	15	10
	Downton	3¼	10	8¼					

[1] The figures for Combe and Wootton are from Ballard: *op. cit.*, p. 459.

[2] These figures are calculated from the roll printed in J. E. Thorold Rogers: *op. cit.*, Vol. II (1866), pp. 617–30. The hypothetical *yields* were: Wheat, 3¼; Barley, 2.

[3] These figures are calculated from the tables in J. E. Thorold Rogers: *op. cit.*, Vol. I, pp. 38–9. The number of manors are those for which *wheat* figures are available. The hypothetical *yield* averages are: Wheat, 5¼; Barley, 5½; Oats, 3¼.

[4] The figures for Witney, Brightwell and Downton are from Levett and Ballard: *op. cit.*, pp. 203, 210, 216.

[5] The figures for Hawsted are calculated from those given in Cullum: *op. cit.*, pp. 215–19.

[6] These figures are calculated from the tables in Gras: *op. cit.*, pp. 267–8. The areas were: Wheat, 2366½ acres; Barley, 1302½ acres; Oats, 1660¾ acres. The yields were: Wheat, 3; Barley, 3¾; Oats, 2¾. Besides the figures in the table "hypothetical" *yields* are available for a few years for Wistowe, Huntingdonshire, viz.: Wheat, 1½ ? (1307), 4¼ (1311), 7¾ (1316), 3 (1318 ?); Barley, 5¾ (1307), 3½ (1311), 3¾ (1318); Oats, 3½ (1307), 1½ (1311), 1½ (1318 ?), 2 (1351), less than 1 (1368). But I suspect that sheaves of oats fed to stock were not counted. These figures are calculated from Neilson: *op. cit.*, passim.

these show an increase of over 1 bushel for wheat, an increase of 4 bushels for barley and a decrease of about $\frac{3}{4}$ of a bushel in the case of oats.

3. *The Fifteenth Century.*—For the fifteenth century neither Lord Ernle nor, I think, Dr. Bradley quotes any figures at all, and statistical evidence of this period is certainly hard to come by. For one thing, scholars have paid less attention to the fifteenth-century account rolls than they have to those of earlier date. The thirteenth-century accounts have attracted attention because they are the earliest we possess, and the fourteenth-century accounts have interested historians because of the light they throw upon the effects of the Black Death and the Revolt of 1381. But in any case a fifteenth-century minister's account is liable to be deficient in figures bearing upon the yield of the crops. It was becoming increasingly common to let the demesne to tenants, and when the land was dealt with in this way the lord's bailiff was no longer interested in keeping an account of the crops.

It may, however, be worth while to set forth the fragments of evidence which I have been able to collect. The first is some figures relating to Adisham in Kent which come from a document in the archives of Canterbury Cathedral. This document is, unfortunately, undated, but Thorold Rogers says it " is certainly to be assigned to the middle of the fifteenth century." And Rogers tells us that it shows the rate of production per acre to have been: Wheat, 12 bushels; Barley, 16 bushels; Oats, 20 bushels.[1] It will be noticed (*a*) that these figures are all larger than the average figures both of the thirteenth and the fourteenth centuries; (*b*) that the crops of wheat and oats exceed the largest in the thirteenth-century table and are only surpassed by two fourteenth-century wheat crops; (*c*) that the barley crop is only exceeded by 4 thirteenth-century and 14 fourteenth-century crops. The second piece of evidence is that supplied by the Account Roll of Ansty in Hertfordshire which is printed in the Appendix to the first volume of Cunningham's *Growth of English Industry and Commerce* and belongs to the year 1402, so that the harvest of which it tells us is that of 1401. The application of the " hypothetical " method to this document gives the following figures: Wheat, between $8\frac{1}{4}$ and $8\frac{1}{2}$ bushels per acre; Barley, between $26\frac{1}{2}$ and $26\frac{3}{4}$ bushels; Oats, between $9\frac{1}{4}$ and $9\frac{1}{2}$ bushels; Peas, between $6\frac{3}{4}$ and 7 bushels. Wheat, barley and oats were thus superior to the averages

[1] J. E. Thorold Rogers: *op. cit.*, Vol. IV (1882), p. 39.

of the thirteenth and fourteenth centuries.[1] The ratio of produce to seed was, however, less than 3 in the case of peas—a figure considerably poorer than the average figures for the preceding centuries. Lastly, an account roll of Wistowe in Huntingdonshire, which probably, but not certainly, belongs to the year 1466, contains particulars (on the "hypothetical" basis) of a barley crop of over 23 bushels (with 5 as the return of produce to seed), which is larger than any barley crop in the thirteenth century table and considerably above the average for the fourteenth century. As regards the character of the seasons it should be noticed that wheat and barley prices were abnormally high in 1402, and that prices in 1467 seem to indicate that the barley harvest of 1466 was little if at all above normal.

Before an attempt is made to summarise the conclusions which are suggested by all this evidence a word must be said about another method of testing the information which bears upon the theory of soil exhaustion. No doubt one of the best tests would be to compare the average yields of the same manors for the thirteenth and fourteenth centuries. This method would eliminate uncertainties which spring from differences in the size of the acre and in the original fertility of the soil as between place and place, and, if records for a sufficient number of seasons could be obtained, the influence of abnormal seasons would be discounted. But data are not available in print for an adequate application of this test. Dr. Bradley attempts to apply it in the case of Witney, but she fails to recognise that some, and possibly all, the Witney figures are "hypothetical," and she only applies the method to the case of wheat. It is true that the oats at Witney, as well as the wheat, show a fall in the fourteenth century as compared with the thirteenth century (from an average of about 13 bushels to one of not quite 9 bushels); but the significance of these figures is reduced by the fact that the barley average slightly improved, being between $14\frac{1}{2}$ and $14\frac{3}{4}$ bushels in the later and almost exactly $14\frac{1}{4}$ bushels in the earlier century. In any case Witney is only one manor.

In regard to the problem as a whole I wish to emphasise the fact that I do not profess that the evidence I have brought forward is adequate to prove, or even to make probable, any positive conclusion. I am not prepared to maintain that the yield of corn improved or even remained steady in the later Middle Ages. All I contend is that until much stronger evidence is forthcoming

[1] That is, if one-ninth is added for tithe to make the figures comparable. But I feel uncertain about my interpretation of the entry regarding oats.

than that provided by Lord Ernle and Dr. Bradley, it is quite unscientific to conclude that the open field farms did decline in fertility in the fourteenth and fifteenth centuries. For the indirect evidence cannot easily bear the construction put upon it. It is suggested by Lord Ernle that in the later Middle Ages the poorer land "dropped out of arable cultivation because it no longer produced enough to make tillage profitable," and that "land which had produced a livelihood for a man and his family ceased to supply his necessary food." [1] But surely, unless the population declined, a diminution in the fertility of the soil would tend, in a self-supporting country, rather to produce an increase than a restriction of the arable area. And if the population declined—if the reduction of population by the Black Death was not rapidly made good—then the most obvious explanation of the conversion of arable to grass would seem to be the diminished demand for bread-stuffs. The new theory is so hard to reconcile with the facts of general economic history. If men found it harder to get food because of the exhaustion of the soil, how can we explain the expansion of industries such as cloth-weaving which did not increase the food supply? Is there any evidence of considerable and increasing importation of food-stuffs from abroad? If food did come from abroad, how is it that the open fields of the continent were able to supply it? Why did not they, too, suffer from this process of soil exhaustion? And why did wages in England rise? How was it that the amount of wheat which the agricultural labourer's wage would buy increased so enormously between 1300 and 1500? If the peasant's holding was no longer able to supply him with as much food as it formerly did, he would surely have dragged wages down by his urgent need of part-time employment as a wage-earner.

Thus the indirect historical evidence, like that which directly bears upon the question of yield, does not even point in the direction which the theory of soil exaustion seems to require. And apart from historical facts the theory is on the face of it anything but probable. It is as hard to reconcile it with what we know of the processes of soil exhaustion as it is to fit it into the general framework of English economic history. On heavy land a bare fallow every third year would probably be sufficient to maintain fertility. Moreover, the arable did receive some manure in the Middle Ages, and some of it was cultivated on the two-field system and was fallowed every other year. Finally, if the fertility of the soil was reduced, is it likely that the course of events would

[1] Lord Ernle: *op. cit.*, pp. 838, 899.

have been such as Lord Ernle supposes? The arable was not virgin soil in the thirteenth century: probably the greater part of it had been under the plough for many hundred years. If, then, the yield was 10 bushels of wheat per acre in the thirteenth century and thereafter declined, we must either suppose that the crops were incredibly large, say, at the time of the Norman Conquest, or else that the system only began to exhaust the soil after giving stable or increasing returns for several centuries. But the Rothamsted experiments in continuous cropping seem to indicate that the tendency of an exhausting system of cultivation, at least in the case of wheat, is to reduce the crop to a minimum in a few decades, but that this minimum, once it is reached, can be maintained almost indefinitely. A plot at Rothamsted has been under wheat every season for 78 years without receiving any manure: the crop diminished rapidly in the first 30 years; but Sir Daniel Hall (then Mr. A. D. Hall), writing in 1905, said: "All the evidence seems to point to the fact that this plot, which has been without manure of any description since 1839, has reached a stationary condition, and that the average crop of 12½ bushels for the last 40 years will in future diminish very slowly, if at all." [1]

REGINALD LENNARD

[1] A. D. Hall: *The Book of the Rothamsted Experiments*, 1905, p. 37. The case of barley is somewhat different, and Sir Daniel Hall, speaking of the plot on which barley has been grown for the past 70 years, says: "On the whole, the results point to the probability that unmanured land will become unable to grow barley continuously at a much earlier date than will be the case with wheat, so comparatively restricted is the range of the barley roots," *op. cit.*, p. 76. But though the crop of barley has declined continuously from decade to decade, a decline in the later decades also took place on the manured plots, and I notice that the steepness of the curve which shows the decline on the unmanured plot is less for the later decades (when the dunged plot was also declining in yield) than it is for the earlier period when the crop on the dunged plot was increasing. These facts seem to indicate that the tendency to stability is not peculiar to wheat. I am indebted to Professor Somerville for valuable information in regard to these experiments.

INTERNAL AND EXTERNAL PURCHASING POWER OF PAPER CURRENCIES

THERE has been some discussion as to the relationship between change in the value relatively to the American dollar of national monies which are practicably inconvertible, and the change in the general level of wholesale prices as shown by index-numbers. Although there is a substantial measure of correspondence, there are important discrepancies and discussion has centred upon the explanation of the discrepancies.

In this connection Prof. Pigou has shown [1] that the discrepancies vary considerably according to the particular index-number used for each country, but that there nevertheless remains something which is not to be explained by mere accident.

It appears to have been the case that during the first half of 1919 the exchange value of European currencies in terms of the dollar had not fallen by so much as the extent to which European prices had risen relatively to American prices (measuring in each case the rise since 1913). By 1920 the reverse was the case. Exchange values of money in terms of the dollar had fallen by more than the extent to which European prices had risen relatively to dollar prices.[2]

In the early part of 1919 the exchange value of the franc had

[1] ECONOMIC JOURNAL, December 1920: "Some Problems of Foreign Exchange."

[2] As it is intended to question the theory which appears to be implied in much of the discussion of the causes of this phenomenon, the nature of the question may be made plainer by the use of a few symbols. Let a selected group of goods cost in France in 1913 F_1 francs, the same goods in America cost in 1913 D_1 dollars, and the exchange value of the franc is R_1 francs for one dollar.

For a year later let the same group of goods cost F_2 francs in France and D_2 dollars in America, and let the exchange value of francs be R_2 francs per dollar.

The internal purchasing power of the franc has changed in the ratio of $\frac{F_1}{F_2}$ (*e.g.* if prices have doubled, the purchasing power is halved). The external purchasing power of the franc has changed in the ratio of $\frac{D_1 R_1}{D_2 R_2}$. The extent of the change will be the same for internal and external purchasing power only—if $\frac{F_1}{F_2} = \frac{D_1 R_1}{D_2 R_2}$.

Prof. Pigou's index-numbers on p. 461 are $\frac{100 D_2 R_2}{D_1 R_1} \cdot \frac{F_1}{F_2}$.

not fallen so much, having regard to the changes in price levels, as might have been expected, and in the latter period it has fallen further than might have been expected.

With regard to the first period, the "pegging," more or less successful, of exchanges together with financial borrowing from the American Government, etc., may account for the phenomenon, as Prof. Pigou contends. The main question which interests people now, however, is the low exchange value of continental currencies in terms of the dollar. There has been much discussion, and it may be said briefly in the words of Mr. T. E. Gregory,[1] that "Exchange experts at the present time are divided into two camps: those who think that the exchanges are dislocated because of inflation, and those who think that they are dislocated because of 'an excess of imports over exports.'" Mr. Gregory pronounces his adherence to the former school and will allow no merit in the latter. Prof. Pigou is not to be readily fitted into any briefly described school, but may be said, in the article cited, to imply a recognition of what Mr. Gregory would call the "balance of trade theory." The present writer has no substantial quarrel with most of Prof. Pigou's discussion, but he takes exception to his statement of the general doctrine of purchasing power parities, and submits that some further analysis of the theory is required in order to make clearer the points at issue between the more controversial writers.

No one will deny that if one country, say France, inflates its inconvertible paper money whilst England, let us say, has ceased to do so, that will result in a fall in the value of francs in terms of English money and a rise in all prices in France, expressed in francs. There seems also, in the absence of any change excepting this purely monetary change, to be no reason why prices of all goods in France, whether domestic or imported, mobile or immobile, should not move in the same degree, given sufficient time for the adjustment to take effect. The real position in the end would be exactly the same as before, so far as the production and distribution of goods was concerned. If all prices in France had doubled for purely monetary reasons, and no such change had occurred in England, one would expect to find that the franc had fallen to exactly half its former value. If it was otherwise, there would be permanent alterations in trade, which there does not seem to be any reason to expect. During the process of adjustment, however, there would be alterations in trade. France would at first experience an adverse balance of

[1] *Foreign Exchange, Before, During and After the War.*

trade. In such circumstances it may be perfectly correct to say, with Mr. Gregory, that the adverse balance is an effect and not a cause. It is the result of the inflation, and if other circumstances remained the same, and if the additional inflation, once made, were to cease, the fall in exchange value of the franc would check imports into France and stimulate exports, and would ultimately put an end to the adverse balance of trade. A new equilibrium would be reached on the basis of a lower level of value of the franc. There is also the complication, recognised by Mr. Gregory, that if the inflation of francs persists, dealers may depress the value to-day below the point which the existing volume of francs would justify, in anticipation of future depression. On the contrary, they may anticipate that the future is going to make for an improved value of the franc, and the value may be raised, by bull speculation, above the point which would be the equilibrium if the present volume of francs and of English money were stereotyped.

It is open to question, however, how far this tendency to anticipate events can be accepted as an explanation of the low external purchasing power of continental currencies, relatively to their internal purchasing power. If dealers can anticipate that the value of the franc will be lower in six months' time because of further inflation, and therefore depress the value at once, by bear speculation, why should not dealers in wheat and other commodities in France equally anticipate a future rise in the price of wheat, etc., in France, and consequently raise the price at once in anticipation? It is not apparent why anticipation should be more effective in relation to external than in relation to internal purchasing power.

So long as changes occur solely on account of changes in the volume of inconvertible paper money, any index-number, whether of wholesale or of retail prices of goods in the country in question, should serve to register correctly the change in the value of money and should be reflected in a corresponding change in the foreign exchange quotation of the money, allowance being made for any similar and contemporaneous changes in the volume of foreign money, and provided that time is allowed for the subsidence of incidental temporary variations between the effect on different kinds of goods, and provided that prices are free from control. In fact, in pure theory the price of any one article should suffice for an index-number.

Actually, however, there are other changes occurring, and in particular the foreign exchange value of money may be strongly

affected by a change in the demand for foreign goods, or in the circumstances of supply of goods available for export or by the necessity for payment of foreign debts.

In the circumstances of Germany, for instance, following the end of the War, a heavy depreciation of the value of the mark in terms of dollars would have been inevitable even if there had not been a great inflation of the volume of marks. It is nothing anomalous that the external purchasing power of the mark has fallen to a greater degree than has the internal purchasing power. It is a natural consequence of abnormal indebtedness and dependence on foreign imports coupled with inability for a long time to produce goods for export.

The effects of circumstances of this kind, with regard to index-numbers of prices and the foreign exchanges, can best be considered if we make abstraction of changes in the volume of money. We might, of course, consider the problem on the hypothesis that the pre-war gold standards were in general use, but it is probably simpler to retain the supposition that the country under consideration has an inconvertible paper money.

Suppose we take an extreme case of two countries which are isolated, each having its own inconvertible paper money. Suppose first that there is no foreign trade at all, and therefore no exchange of the money and no rate of exchange. Some kind of comparison of the relative values of the monies might be made, however, by compiling index-numbers. Calling the monies shillings and marks and the countries A and B, we may suppose it is found that wheat sells, on an average, at 50 shillings per quarter in A and 50 marks per quarter in B. It is enormously against the probabilities, however, that, in the circumstances supposed, the equality of prices would apply, even approximately, all through the range of goods. That natural inequality of the conditions of production in different "countries" is the fundamental fact underlying international trade. We may suppose, however, that by computing index-numbers of all those commodities which were tolerably comparable in quality, a rough comparison could be made of the purchasing power of the shilling and the mark, and that they are about equal. It is of some use to think out what this would mean in various circumstances, but that cannot be entered upon here.

Now let there be communication opened which permits trading in only two commodities—say tin is exported by A and copper by B. This will result in the determination of a rate of exchange between marks and shillings; but there is no reason at all why

it should lead to equality between shillings and marks. The rate will depend entirely on the circumstances of supply and demand of these two articles. The shilling may exchange for two marks, without any substantial alteration of the general index-numbers, and this may be a permanent and normal state of things.

Now it is quite true that if, in these conditions, country B doubled the amount of its money, for some reason of internal policy, that would react on the foreign trade and the ultimate effect would be, other things being unchanged, an exchange of four marks instead of two for the shilling. Any temporary adverse balance of trade would be a mere episode and an effect of the ulterior cause, the change in volume of money. It is also true, however, that if there were no change in the relative volumes of money a similar change—or one in the reverse direction—could be brought about by a change in the circumstances of supply of or demand for either tin or copper, and such change might be of any degree of permanence and might coincide with and complicate effects due to changes in the volume of money.

We may now go to the other extreme, and endeavour to suppose every commodity to be the subject of international exchange, in a world market which is very large in comparison with that of any one country, country A now standing for the world, and the cost of transport so small that the price of no article is, to any appreciable extent, affected by local conditions. Even so, an alteration in the exchange rates of country B may be produced without any change in the volume of its money. Suppose persistent drought diminishes the harvests and compels more dependence on foreign food supplies. That creates an adverse balance of trade and lowers the exchange value of marks. The extent of the alteration will depend on the circumstances of supply of goods available for export and of demand for goods to be imported. Conceivably the value of the mark, in foreign money, may be halved and, in the special conditions assumed, one would be obliged to infer that all prices of goods in marks would be approximately doubled, and one might then be tempted to say that people in B would be getting the same income as before in marks but would be able to buy only half as much. If that were a possible result Mr. Gregory might say that it was in accordance with his view, since he recognises that halving the volume of goods must be more or less equivalent to doubling the quantity of money. Actually, however, we cannot really postulate any such simple result even in the most abstract imaginary

case. If the price of raw cotton in B were doubled by reason of the halving of the value of the mark, and the same wages in marks continued to be paid to the spinner, weaver, etc., you could not have a simple doubling of the price in marks of yarn or piece goods. The doubling of wholesale prices of goods entirely imported could not and would not mean that just half the volume of physical wealth was available for purchase.[1] The effect on the exchange value of the mark would quite properly be said to be the result of the change in the relations of supply and demand in connection with foreign trade, and would have no necessary tendency to be equal to the change which might occur in the physical volume of the flow of wealth. We might say, however, that wholesale prices of many goods would exactly reflect the change in the value of the mark.

The case just postulated, however, is also an extreme case. The truth about any particular country is somewhere between the first case, where there was only one article of import and export, and the second, in which we tried to suppose that everything on which money was spent responded perfectly to a world market price on which the influence of any one country was negligible. The price of milk and bricks and hay in Dresden, for instance, would have to correspond with the prices in Chicago, for any given value of the mark in dollars. In the former case it was seen that there might be great changes in the rate of exchange without any appreciable correspondence with a change in the index-number of prices as a whole. In the latter case there would be some approximation towards a corresponding change in wholesale prices.

It is obvious that the abstracting of all costs of transport means postulating a state of things so unreal as to be practically unimaginable. The true bearing of transport costs requires consideration, which will be given later on. It may be useful, however, to mention first of all some special circumstances which tend to prevent any close correspondence between the rise in the index-numbers of prices, both wholesale and retail, and the fall in the value of a paper money, and we may take the German mark as an illustration.

So far as retail prices are concerned, a considerable lag in

[1] Even if the hypothesis of no transport costs applied also to retail goods, it would still be the case that personal services were not transferable from country to country, nor the use of real property. If money incomes in marks were unaltered, in the aggregate, the index-number which was to register change in the cost of living would have to include services and rents.

time may be expected between a fall in the value of the mark due to circumstances connected with foreign trade and a change in German retail prices. This would not be the case, however, if the sequence of events were as it is represented by those who make everything turn upon currency inflation. From that point of view we should expect to find, with increasing volumes of marks being issued, no effect in the direction of depreciation in the exchange value of the mark until first of all money incomes in Germany had risen, causing additional demand for goods, including foreign goods. The increase of retail demand should be, either the first event in the sequence, or at least contemporaneous with the other events.

With respect to wholesale prices, there are several circumstances not yet mentioned which tend to prevent close correspondence between the rise in their index-number and the fall in the mark.

In the first place, there has been and still is a substantial amount of Government control of prices. It is extremely difficult in looking through lists of German prices to know how far they represent really free market conditions. In the second place, even where Government control is not exercised, there is a great deal of control by syndicates—far more than in this country. Thirdly, there are restrictions on exports of many materials. If a London dealer calculates that at the day's quotation of the mark and of the price of some material as quoted in Hamburg in marks, it would pay to use his English money to buy that material, it does not follow that he can do it with any real advantage, because he may not have the ability, if necessary, to bring the goods to London and sell them for pounds sterling. The fact of these restrictions is one circumstance which helps to render possible such rapid changes in the value of the mark as occurred in the autumn of 1921.

Independently of restrictions on trade and price control, however, there has to be considered also the inevitable and abiding influence of cost of transport. Under a gold currency the cost of transport of gold is not zero, and its existence allows of fluctuations in exchange rates between the "gold-points." What corresponds to that under a *régime* of paper money?

It is the cost of transport of goods of all kinds—from platinum, for which that cost per unit of value is very small, to land, for which it is infinite.

Associated with this is the fact that there are likewise costs of internal transport within each country, but for the moment

we can leave that out of account and consider Hamburg, let us say, as equivalent to Germany and London as equivalent to the British Isles.

Let us suppose that in an initial state of equilibrium wool is one of the articles which is imported into Germany from England, and for simplicity we assume that " wool " stands for one homogeneous article. The German price is the English price plus cost of transport (it does not matter whether that cost is incurred in marks or in pounds). Now suppose that under altered conditions the value of the mark falls, but without any increase having occurred in the volume of marks. Before this can have the effect of reversing the direction of trade in wool, the change in prices must be such that the English price exceeds the German price by the cost of transport—that is, the underlying condition even when time has been allowed for the incidental changes in industrial organisation which this change would imply.

The question is further simplified if we assume that London stands for the world at large and that the change in conditions which has occurred is local to Germany and that Germany is small relatively to the world at large. In that case, the price of wool in pounds sterling will not be affected to any great extent. The greater part of the change in price will be in the German price. That must change, but not simply in proportion to the fall in the value of the mark. The change must be equivalent to two opposite effects—(1) a rise proportionate to the fall in the value of the mark counteracted more or less by (2) a fall equivalent to double the cost of transport of wool.

In actual conditions, for wool we must substitute numerous kinds of wool, of yarn and of cloth, some of which normally are sent from England to Germany and some in the reverse direction. And there are all the other materials and articles and services which enter into international trade. We can keep, however, to the idea that " wool " stands for one of those which, under the altered conditions, would be changed from a German import to a German export. The change in its price must be compounded of two opposite tendencies, as shown. In other cases one may simply have a cessation of import by Germany without any export. That requires a rise in the German price equivalent to the drop in value of the mark compounded with a fall equivalent to at least once the cost of transport, but less than double that cost. In other cases Germany still continues to be an importer and the price in Germany must rise by at least as much as the fall in the value of the mark.

Even, therefore, if we confine our index-number of German prices to goods entering into international trade, the net result will be that it should be expected to rise by less than the extent to which the mark has fallen, in so far as that fall has not arisen solely through currency inflation.

If we approach nearer to actual conditions and recognise that Germany is a large area, we may have, in the initial circumstances, wool imported and taken both to Hamburg and to Dresden. As the result of the fall in the value of the mark wool may cease to be sent to Dresden, though still imported into Hamburg. The price in Hamburg must rise as much as the mark has fallen, but in Dresden this will not be the case. Even, therefore, in the case of articles which continue to be imported to some extent, an average price, taken over the whole of Germany, will not show a rise equal to the fall in the mark.

It is submitted, therefore, that Prof. Pigou's statement[1] of the doctrine of purchasing power parities and of the effects of a cause such as "an alteration in comparative productive efficiency or in comparative demand" requires modification. The phrase "allowance being made for transport charges" is too brief to bring out the importance of these charges as taking the place of "gold-points" when one has to deal with paper money. For problems such as those under discussion it is not admissible to abstract all transport charges. That is to rule out essential and fundamental conditions, even if we are dealing with gold standards only, but *a fortiori* when we are concerned with paper money and the connection between foreign exchange and index-numbers of prices.

It is to be noted that it is not only the transport charges of those goods for which these charges are lightest relatively to their value that come into play. Tin is a good instance of such an article, but the restoration of the balance of trade need not be brought about by a reversal of the movement of such things as tin. It happens that Germany must import tin. Its price must, sooner or later, rise in marks in proportion to the fall in the value of the mark, and so it happens to be the case also with many of the analogous commodities.

To summarise the conclusions of this part of the argument, they are that when a fall in the mark occurs from some cause other than inflation of the volume of marks, (1) the index-number even of articles and materials which continue to be imported should not be expected to rise by the full extent of the fall in

[1] ECONOMIC JOURNAL, December 1920, pp. 462, 463.

the mark, if the index is an average of prices over the whole of Germany. (2) This is still more true of an index-number which is an average of prices which include prices of things ceasing to be imported or becoming exported instead of imported. (3) This is still more true when things are included which are too immobile to be included in international trade to any important extent.

When we have regard to an index-number of retail prices, we have case (3) in a more extreme form. In so far as the mark falls in value solely in consequence of the kind of cause under consideration, there would be no tendency for the index-number of cost of living to rise in anything like the same ratio. If the income of the German public in marks is not increased, there being, by hypothesis, no increase of money, the fall in the mark raises prices of imported goods and materials, but in so far as German wages and salaries and profits enter into the cost of production of goods and services, there would be no increase of prices, and a sufficiently comprehensive index-number should reflect this fact.

Exception must be taken, therefore, to Prof. Pigou's statement [1] that " if any cause, such as an alteration in comparative productive efficiency or in comparative demand, alters the relative value of the things England imports and the things she exports, and no other change occurs, the external and internal purchasing power of sterling will remain unaltered." If the change is unfavourable, the external purchasing power should fall relatively to the internal purchasing power.

The low value of external relatively to internal purchasing power of continental currencies generally is, it is submitted, the effect of impoverishment and such as might be expected to result from the conditions brought about by the War, and may be expected to continue for a long time.

In the case of the mark, the very severe depression of the exchange value may be, for the moment, largely brought about by bear speculation or the collapse of bull speculation. Briefly it may be said that [2] every fall in the quotation makes the balancing of payments in and out more and not less difficult within periods which are not long enough to comprise extensive changes in the structure of industry and commerce. The conditions are extraordinarily favourable for periodical fits of alternating bull and bear speculation, and if these conditions are

[1] *Loc. cit.* p. 463.

[2] *Vide* Note by the writer in ECONOMIC JOURNAL, March 1920, on " The Instability of Foreign Exchange."

likely to continue for a long time, it might have to be considered whether, in spite of all the difficulties, some kind of control designed to check such speculation might not be worth attempting.

A condition precedent would be, of course, the stopping of further multiplication of the currencies. The bear speculators would always come out best if further floods of paper money were always being produced. Given that this increase was stopped, however, it might be possible to arrange for maintaining a comparative degree of stability if the central banks of Germany, France, etc., were to acquire holdings of sterling or dollar securities or commercial paper which could be put on the market whenever there was reason to believe that the exchanges were being depressed unduly by mere speculation—that is to say, when the situation was such, to put it in a brief phrase, that the value of the mark was falling further just because it had already fallen.

Complete stability of exchange rates, either by return to the gold standard, or to the gold-exchange system as operated before the War by a number of countries, can scarcely be expected for a long time to come. A gradual approximation to stability may prove feasible, however, by the method above indicated, once the continued increase of currencies can be stopped.

C. F. BICKERDIKE

KNAPP'S THEORY OF MONEY[1]

PROFESSOR KNAPP'S lectures in Berlin in 1895 had laid down two leading principles: (1) that a country's money is what the State accepts in payment at its own counters,[2] not simply what is of general acceptance among the people; (2) that a particular metal is selected for the standard of currency not from any regard to the qualities of metals, but with an eye to the better control of exchanges with the commercially strongest foreign States (see Preface, v, to 1st ed., 1905).

The Professor developed these ideas further in his Chair at Strasburg, and the first edition of his book is dated from that city with the present title. He has become the chief spokesman of what is called inexactly the legal theory of money. The adjective is inexact, because, though he indeed says, "Money is the creature of Right" (*Rechts*, p. 276), it is government and administration, the State and not the Statute Book, which he regards as settling a country's money (pp. 95, 97, 105, 159). The title is therefore best rendered "The State Theory of Money."

His attitude to the theory of currency is like that of Bagehot to economics. As an Economist, Bagehot deliberately confined himself to modern great industry and commerce without denying the right of their predecessors to be studied, indeed himself studying them in another capacity. Professor Knapp deliberately chooses (Preface v, § 2; cf. pp. 82, 201, 281) to regard money as it now is in fully developed civilisations, without denying that primitive man had means of exchange worthy of study (*e.g.* pp. 8, 23). In a century when absolute sovereignty is challenged on all sides, he contends that the *fiat* of the ruler decides what shall be the money of the country, the money in which (*a*) the State shall make its own payments ("apocentrically"), (*b*) the subjects shall make their payments to the State ("epicentrically"), and (*c*) their payments to one

[1] *The State Theory of Money* (*Staatliche Theorie des Geldes*). By GEORG FRIEDRICH KNAPP. (Duncker and Humblot: Munich and Leipzig. 1921. Third Edition, revised and enlarged. Pp. viii + 461.)

[2] Cf. pp. 87, 99, 121. But on p. 105, middle, it is what the State *pays out* (cf. pp. 93, 97, 148 foot).

another ("paracentrically") (p. 86). He gets to the heart of his subject by considering (p. 9, cf. VI.) what is implied in "means of payment," and he finds the most fruitful element is the notion of Debt and Obligation, indispensable in all business. Money is necessary because obligations incurred in the past must be met in the future, and it is the part of the State to provide the appropriate instrument, which may be this metal or that metal, or (it may be) paper and no metal at all (p. 52; cf. pp. 42, 43). In a change from one to another, say from silver to gold, the old units of value are preserved in order that the obligations may be evidently maintained; if a man owed five pounds before, he owes five pounds now (cf. p. 47). Our author has not much sympathy for sufferers by altered value; they must be prepared for the chapter of accidents like other mortals (pp. 12, 14-17, 195, 443). The essence of the change of standards is the preservation and transfer of the obligation, which during the process of change is disembodied, existing only in a condition of "Nominality" (p. 21). Most Germans would have said "Ideality," for the process is like that of translation from one language into another; to translate is to transfer; and, during the translation, the transferred subject of the change, for the moment disembodied, is not the words but the meaning. In the change of standard this disembodied meaning (in Professor Knapp's opinion) throws light on the whole mystery of money. Later, he finds help in a similar disembodiment, the bare form of "payment," which is the legal transfer of claims and counter-claims, expressed in units of value (p. 138). Money is essentially no metal but a "chartal" creation of authority (pp. 20, 26, 31, etc.). The State finds itself in surroundings made for it by history, tradition and custom. It acts according to its lights, which are sometimes very imperfect (p. 172). In the discussion of monetary theory, therefore, though money is of political origin, politics should be excluded so far as may be (pp. 447; cf. p. 101, etc.). Hence there is only a brief account of Bimetallism (p. 101 *seq.*). He finds in it a good illustration of his State theory. There is always one of the two metals really the standard, the one in which the State elects to pay its own obligations. The chosen money has then (in his phraseology) the position of "valutary" money, the other being "accessory," in which the subjects may pay if they like (pp. 94, 97, 105; cf. 305).[1] In ordinary language, both gold

[1] English Treasury Bills being receivable in payment of taxes might presumably be classed as "accessory."

and silver money would be legal tender, but, when the State pays only in one, that one thereby becomes the standard money of the country. The State is most influenced in its choice by the example of its commercially strongest neighbour. If countries had no need of foreign loans, they might, like England, imitate nobody (pp. 259, 261, 278); but the continental States in their own interest have followed English example and adopted the gold standard. Each State deals in a sovereign manner with its own "chartal" money, but cannot so deal with that of any other State. It may fight this difficulty by treaties and by unions, such as the German-Austrian Monetary Union of 1857 (pp. 252, 330), the Latin Union, and even the German Empire itself with its removal of Particularist currencies (p. 341; cf. p. 331). Apart from these it handles inter-state relations, on serious occasions (p. 242), by what our author calls "exodromic" policy, a policy seeking to improve the position of its currency among foreign currencies (p. 238). He concedes that, where the related States have a common metallic standard, ordinary short-lived fluctuations regulate themselves automatically; but he thinks that, where there are signs of a long-continued depression of our money in the foreign exchanges, there should be intervention (pp. 242–3, 257). So England intervenes with the Rate of Discount: professedly to guard its reserves, really to keep up the par of its money (p. 244). This is not to be called a metallic par; it results from general trade, not the trade in metals alone, and from deliberate policy (p. 209; cf. p. 211). So Austria from 1894 regularly formed a store of bills on England, which it sold at par when the exchange was below par.[1] So Russia about the same time (1894) supplied its banking agents in Berlin with a stock of roubles and marks, with instructions, when exchange fell below the par of 2·16 marks per rouble, to offer 2·16 marks for roubles brought to them, and, when exchange rose above 2·16, to offer roubles at that figure of 2·16 (pp. 248, 249). Like the "pegging" of the dollar in 1918, this last proceeding was at the expense of the taxpayer. In Austria the proceedings were at the expense of the Bank, in England at the expense of the world of business (p. 251). It would be better to be so strong commercially that we need no

[1] P. 246. See Mr. J. M. Keynes, *Indian Currency and Finance*, 1913. p. 24: "In the third quarter of 1911 the Bank placed not less than £4,000,000 worth of gold bills at the disposal of the Austro-Hungarian market in order to support exchange." Cf. *ib.*, pp. 28, 33. See also ECONOMIC JOURNAL, June 1909 (articles of Mr. Conant and Herr v. Mises).

such sacrifices; and for this we need a firm commercial policy; mere monetary regulation will not go to the root of the matter (p. 252). But it will go farther than most people think. Our author tries to show that in the gold and silver markets its scarce-suspected presence animates the whole (pp. 216–236). First of all, consider two extreme assumptions: (1) That the gold standard has been adopted everywhere. Then silver becomes a mere metal, like lead or tin, the price of which depends on "supply and demand," and the use of it is left to the arts entirely (pp. 216-7). (2) That only one country, say India, clings to the silver standard, that there are no arts in competition with the Mint, and that therefore the only employment of silver is in the coinage. London is the great silver market of the world. The price of silver, then, is determined by the Anglo-Indian exchange, in short by purely monetary causes (pp. 217-8).

As a matter of fact (he says) neither hypothesis is true; but the second is the nearer to the truth, for, under free coinage, the Mints dominate the markets, not the markets the Mints. Even in presence of a gigantic disturbance of normality like the great increase of the production of gold in California and Australia, the machinery by which the price of gold is lowered and of silver raised is the foreign exchanges, and this means "exodromic policy." In India, for example, the Mutiny of 1857–8 created a State need for rupees without end, and the price of the rupee rose, followed by the price of silver generally (pp. 226–7). "It was not the dear silver that made the rupee rise; it was the dear rupee that made the silver rise" (p. 227). After the adoption of the gold standard by so many States in 1871 6, the position of India was weaker; India and Mexico were the only maintainers of the silver standard. China (we are startled to hear) need not be considered (p. 229). Free coinage gives a lowest limit of market price, and the cessation of it in so many countries would tend to a lower price for silver even if there had been no increased production from the mines (p. 228). In 1893, when there was suspension of free coinage in India, the want of the lowest limit was soon felt. The case was the reverse of the case in 1857, when rupees must be got at whatever cost. In order now (after 1893) to pay pensions and interest, it is the sovereigns that must be got at any price, even if the weekly drafts go below the figure fixed in 1893. From being a buyer the Indian Government has become a seller of rupees (pp. 231–2; cf. p. 233). Though the condition of trade and commerce contributed to the depression, it is the new monetary situation which explains

why the rupee went to such depths so often and remained there so long (p. 233).

These are cases where Professor Knapp himself allows that the *fiat* of Government can do nothing; it cannot lay down the law for foreigners. Contrariwise, his critics would admit that within each State legal tender money cannot be so without the *imprimatur* of the State, and in this sense it is open to the author to declare that no money is money but what the State chooses. But in spite of a strong assertion (p. 280; cf. p. 68) that the rule of custom is over, it turns out that the State more often follows its subjects in this matter than leads them, giving a desirable though sometimes reluctant ratification to the claims of commerce and custom (cf. p. 66). The numismatist's doctrine that the rule of tradition and custom prevails nowhere so obstinately as in types of coins is no doubt not decisive of the larger question. But modern history tells of "currency zones" and of an invasion of dollar currency in North America, spreading from the islands to the ends of the earth and forcing its way into legal recognition. The Maria Theresa dollars persist in Abyssinia, the rupee persists in India. Government may indeed control the money that figures in foreign exchanges, and credit itself with having led its people, when really (as our author often tells us) following the example of foreign States. Within its own borders it seems to some of us not more but less free to modify things as they are.

Passages might be quoted (*e.g.* pp. 1, 178, 201, 248) to show that Professor Knapp is substantially at one with orthodox economists in currency policy and practice. His par of exchange, though not to be called a metallic par, coincides therewith. Even his plea for paper money does not involve heresies in practice. He is fond of disguising his own orthodoxy by preferring new names to old, and new reasons to old. Jomini said that the Moscow army was "destroyed not by the cold but by the commander." A conjunction of causes is surely conceivable, whether in politics or in economics, as our author himself has warned us (p. 446, foot). But he usually suggests that the new reason is enough by itself, and the old may be set aside. He is not a Bimetallist; he is not a Metallist at all (p. 7; cf. pp. 101, 235). Gresham's Law is to him a half-truth (pp. 147–8, but see p. 77, top); for example, paper does not displace metal because it is the worse driving out the better, but because the State has made it the better. It might be replied that the State chose it because it was the cheaper.

In the new order of things after the War (p. 362) he foresees no reign of mere paper, but a *régime* of domestic paper under a Gold Exchange standard. He thinks, however, that both the laity and the economists have wrong ideas about paper money. Bank notes, he says, are not rightly taken as promises to pay, and an inconvertible note is not a thing of nothing (p. 120). The notes are not money unless the State says they are (p. 121), and they would be, if promises at all, promises to pay the legal tender money of the country, which, if the State will, might be simply paper (p. 118). A bank-note is an official instrument for making payments to the Bank itself; and this function survives even when redemption ceases (pp. 118, 120). The note is a till-warrant (*Kassen-schein*) of the Bank, becoming money when so proclaimed. The State in standing behind the banks has made them privileged beyond other forms of "capitalism" in sure hope of service in return (pp. 123, 128). The old Hamburg Giro (or Transfer) Bank gives a useful hint. Its customers were depositors who drew on their deposits by orders of transfer in payment of creditors who were also depositors. In this private Paying-club (*Zahlgemeinschaft*, p. 135) there was even created a new unit of value, in the marc banco. No money passed; payment did not mean a transfer of gold or silver or any other "thing" (pp. 131, 133). The State, too, is a Paying Society and can effect transfers without "things" (p. 138). Payment is essentially the legal transfer of claims and counter-claims in units of value (*ib.*, cf. p. 21). The money itself need not pass; and all that is left to pass is the payment itself, an obligation expressed in units of value (p. 142). Value itself is not discussed. Professor Knapp stands perhaps alone in presenting a theory of money without a theory of value. The problem, he says, is a "shoreless sea" (p. 446), and is best left to economics (p. 437) from which, therefore, we are to understand monetary theory can be safely detached. Criticism of index numbers is begun but not pursued, for the same reason (p. 441). In our author's view his subject belongs rather to politics than to political economy. He does not, however, find much comfort in politics, and the action of the State, for example, in causing revolutions in prices is not praised (p. 448). In spite of his self-denying ordinances, he gives us occasional criticisms of political economy. We are told, for example, that the Quantity theory of money is of little value. By that theory the Californian gold affected prices by so increasing English money that the exchange against silver countries was made to fall (p. 225). Our author, without questioning

the result, thinks the process of arriving at it was probably quite different; that the acquirers of the new gold, seeking investment for it, found the rate of interest higher in the silver countries, especially Germany in the 'fifties, and sent their gold thither for investment, say in German State loans (p. 225), thereby raising the rate of exchange in favour of the silver countries. The theory (which is Ricardo's) that the par of exchange is restored by the diminished money of one country being replenished from another is an amateur's theory (*völlig laienhaft*, p. 241; cf. pp. 339, 340, 381). Professor Knapp usually answers an opposing theory by setting up his own against it. This would be quite fair, if his own covered as much ground as the other, which is not always the case. He sometimes leaves us with the feeling that he has made his own theory plausible by narrowing the field of difficulties.

On the other hand, he has been too much blamed for his terminology. He adopts it for brevity and clearness of statement (Preface, vi, 1905), and finds that the want of it may have led to mistakes in policy (pp. 16, 168, 340, etc.). He does not try the patience of his readers nearly so much as Bentham and Herbert Spencer in their later days, and his own countryman Krause all his days. Some of his new terms (say exodromic and accessory) may become as familiar as entity and quiddity. All are derived from Latin or Greek words with their meaning in their face or not far to seek. But it is not an example to be generally followed. Few learned men can be safely trusted with the invention of a new language.

He says himself (Preface, viii, Darmstadt, 1921) that in teaching he usually begins with the historical part of his book. It covers England, France, Germany, Austria (283–405), and is a masterly sketch, with many fresh incidents. We read, for example, that, when free coinage of silver was suspended in Austria for the general public in 1879, the Government went on coining from the product of its own silver mines, which naturally came to it cheap (p. 384). We read also in an Appendix (pp. 406–30) the full story of the Austrian Customs duties, which were under a special monetary arrangement from 1854 to 1906.[1] At the time of the Crimean War, to raise silver money for payment of interest on a foreign loan (where the lenders could not be expected to take paper) the Government exacted all Customs dues in silver pieces of the agreed standard

[1] The heading of the section says 1900, but the statement on p. 419 gives the later date explicitly.

of the Monetary Convention between Austria and Prussia, all inland taxation being satisfiable in paper. Austrian importers were thus driven to purchase silver with paper, thereby sending up the paper price of silver. This *agio* on silver encouraged exports while the silver dues discouraged imports, a joint result possibly desired on the principles of Mercantilism (pp. 410–11). Gold displaced silver in 1878. Customs payments thereafter must be made in gold pieces duly coined *ad hoc* by the Austrian Mint, though equivalents in German or other gold were accepted. The unit of value was called the "gold gulden" (pp. 413, 415, 418). The arrangement was really a second system of currency; and to our author it is an instance of "Synchartism" or two standards at once (p. 417). Perhaps we have no close parallel. In one respect the regulations prevailing in Canada before the War for the chartered Banks supply an analogy. The banks paid for their supplies of Dominion notes and token money in gold, which went into the reserves of the Finance Department.

The "Synchartism" in Austria seems to have lasted till 1906 (p. 419). It is common knowledge that the gold standard of 1892 had not satisfied expectations. After 1892, gold was procured by a foreign Gold Loan and coined into gold pieces, not for issue but as a reserve against the State notes (pp. 391, 394). The exchanges remained unfavourable, especially with Germany, for commercial reasons, in spite of the full covering of the notes (pp. 395, 396): and a decree of 1899 redeemed the notes, not with the gold pieces but with silver coin, solid and satisfactory (p. 398). The State notes disappeared in favour of ordinary Bank-notes (p. 399). After 1900 the domestic money of Austria, in spite of the legislation of 1892, was notes and silver (p. 402). The foreign policy above described (see also pp. 430, 431, 433) kept the Austrian money at par abroad (p. 402). Austria, in fact (to use common language), had slipped into the Gold Exchange standard, where it stayed till the war (pp. 404 foot, 436). Gold pieces were issued tentatively; but there was no evident desire for them (p. 426; cf. p. 428). They came back to the banks, like the Canadian gold pieces of 1912–4.

Professor Knapp's history of the currencies is full of instruction, not only in regard to Germany, France and Austria, but even in regard to our own country. He regards our system of gold currency before the War as exemplary (p. 298). Most of the book was written before the War, or he would not have said

that there have never been State notes in England (p. 292). What he says of the Germany of 1914 applies to the England of 1922—that coining of gold was not stopped, but the permission was a dead letter, for private persons were not allowed to handle it with the old freedom (p. 360).

J. BONAR

RECONSTRUCTION AND MONETARY REFORM

DURING the war, and for some while after, high hopes were nursed and bold schemes formed of "reconstruction." Reformers had the bright vision of a new world, differing from the old, where the age-long puzzles that had given pain and brought strife would be happily resolved amid general consent. The sequel has been disappointing, and one reason can be found in the fact that, while the loss of life and health, dealt pitilessly by the conflict, could be seen at once, the economic blow of the enormous waste of wealth was not felt till afterwards. We can, for example, appreciate now how capital was consumed and not replaced, past, present, and, to some extent, even future, savings being exhausted, and, by modern ways of banking, the resources of credit were miraculously stretched to extreme limits. The consequent lack of means available for costly reform is disagreeably manifest.

It has also become transparent that, though the path pursued may have been in some countries novelly indirect, belligerents, and even neutrals, in this, as in previous wars, sought the ambiguous aid of the "printing press" to meet their big outlay, raising "forced loans" by paper issues "inconvertible" in fact if not in name. They have been no more successful than their predecessors in escaping the result of inflated prices and fluctuating exchanges. There can remain no doubt that the wants, inevitable or aggravated, of the war have brought turmoil or havoc to currencies in most lands, and that in this crucial part of economic business some reconstruction is imperatively needed. It must perforce be attempted: but it should save rather than entail fresh expense. As usually happens, however, at such junctures, monetary debate is haunted by the noisy presence of crazy charlatans or honest self-deceivers, with their blown bubbles of credit-mongering or new or old juggling of elastic paper. Yet the season is opportune for fastening attention on a remedy that, aiming at final and large improvement, could be applied with less friction and more benefit at such a time than when familiar monetary arrangements had been exhibiting normally ordinary behaviour.

We refer to the design to "stabilise the general price-level without fixing individual prices," to which Professor Irving Fisher has for many years devoted great ability, keen logic and wide knowledge. He has made thereon many contributions, as English students are gratefully aware, to learned special periodical and popular magazine and newspaper. The bibliography supplied in his last book upon the subject, entitled *Stabilizing The Dollar*, which was published in New York in 1920, demonstrates the extent and character of that re-polishing work, and exhibits also its respectable lineage, deriving from the direct anticipations of the American astronomer and economist, Newcomb, and our own veteran teacher, Dr. Marshall. For it is no wild empty theorising. On the contrary, much of its solid strength is got from concrete cognate experiment. In the book referred to we think that the claim is justified that no difficulty has been hid, no criticism shirked, and no objection bluffed. The statement seems complete, and, for ourselves, we have not found any unbridged gap or threatening flaw. To that book in particular we would accordingly direct the readers of the ECONOMIC JOURNAL for a full detailed study: now and here we would briefly recall the outstanding features of the scheme, and adduce a few of the main reasons for which, as we judge, it merits the prompt close attention of financial statesmen and Treasury officials, of expert bankers and professional economists, as well as of the general public. We believe that essentially it is so simple and convincing that "he who runs may read."

We will quote the neat summary of the author, reminding our readers that, while he is concerned with the standard of his own nation, the remedy, used independently by any single country, can of course stabilise the pound, for example, no less surely than the dollar. It is, like most notable discoveries once they are made, by no means recondite. "The real culprit," the Professor observes, "being the dollar, the real remedy is to fix" its "purchasing power." At present it is a "unit of weight masquerading as a unit of value." "We have a gold dollar of constant weight and varying purchasing-power: we need a dollar of constant purchasing-power and therefore of varying weight:" "Abolish," therefore, he declares, "gold coin, redeeming certificates in bullion only; establish an index number; adjust the dollar's weight by the deviation of this index number from par; charge a brassage fee, and never at any one time alter the dollar's weight more than that: keep the gold standard of unrestricted deposit and redemption, and keep a sound banking system." Such is the broad

plan summarised aptly in the briefest terms. It should be noted (1) that the brassage fee and the limit of the change up or down made at any one time to a less amount than that are addenda to the original scheme to meet the menace of speculation; (2) that unrestricted deposit and redemption imply convertibility of paper currency and free mintage, with automatic international movement of bullion; and (3) that the plan does not pretend to diminish or remove the need for sound, safe banking.

What are the main powerful arguments in its behalf, and what is their present relevance?

First and foremost, we imagine, nobody would deny the supreme benefit of equipoise, and the considerable harm of instability, in the monetary standard. That lesson has been driven home of late. But it is, or it should be, an anachronism that labour "unrest" be allowed to hinge on speculation in gold-mining or depend on metallurgical invention. The "unit of money," the Professor justly remarks, "is the only inconstant unit we have left in civilisation," and it "is a survival of barbarism." While we remember that changes in the price level are not wholly due to monetary causes, and that the "credit cycle" is a known characteristic of modern trade, we are not concerned to dispute the plea that the "great bulk of almost all" such changes can be ascribed to "money, deposits, and their velocities," and it follows that the chief causes of the variations in the purchasing-power of money are to be found in the money itself. Adjustment, too, such as that contemplated, to the general movement of prices reflected in the index number would correct whatever influence, credit or other, to which such movement might be due. The resultant evils now produced are great. They are worse because they are subtly insidious. Gold, vulgarly deemed unchanging, is only stable in terms of itself. Contracts upset, the slow adjustment of salaries, wages, and rates fixed by law or custom, the unpopularity of the alterations most needed, like rents or railway fares, cause obvious inconvenience; and bad remedies are sought and seized in ignorance, unjust suspicions and class hatred are begot, and partial inadequate diagnoses formed, based on "profiteering," middlemen and what not.

A second group of arguments confirms the first. The substantial merits and the possible defects of the remedy proposed have become more exactly understood during the last quarter of a century or so. The special instrument for measuring aberrations of unstable money furnished by the index number has in our day alone been scientifically studied, its precise value ascertained

and its true capacity probed and gauged. Corrective measures have also been devised and applied. It has been extensively used in actual practice for wage-adjustment during the war and afterwards in our own country, and, though it must be admitted that it has not been immune from acute, and sometimes adverse, criticisms by expert authorities and by the lay public, its broad sufficiency for the end in view, and its adaptability, have, we think, been established. What is even more important, as we judge, is the notable addition made to monetary practice, necessitating, we suggest, an entire fresh chapter of monetary theory, by recent experiments. They have on the whole won a success which was not originally considered likely to ensue, strained though they latterly have been by the severe abnormal pressure of the war. For such expedients as the gold-exchange standard in India and elsewhere, described lucidly and instructively by Dr. Kemmerer and Mr. Keynes, prompt the inference that, if silver or paper can thus be kept on a parity with gold, the varying of the mint price of gold itself in accord with the index number might similarly be employed to ensure agreement of the basic unit of values used with a "goods standard." We doubt whether the full pertinence of these experiments has yet been realised in many quarters. To this it may now surely be added that the smooth initiation, and warm welcome, of "daylight saving" afford independently, as Professor Irving Fisher cogently maintains, a compelling popular illustration of what can be done by suitable device to augment enjoyment without occasioning serious inconvenience or engendering unreasonable alarm. The analogy is apt.

Thirdly and lastly, we would urge that the particular moment is not unfit for the introduction of the change. The situation resembles that obtaining when Ricardo, putting forward his proposal for an economical and secure currency, set a pattern followed after a century or so in the gold-exchange standard. Now, as at the close of the Napoleonic war, the adjusting process recommended could obviously be put to work, and would continue operating, with more facility and less notice, when gold coins are generally disused, and paper substitutes have become commonly familiar. There would be no need for altering the habits, and in consequence there should be no fear of shaking the confidence, of plain humble folk, while the great upheaval of prices that is now causing world-wide discontent must strengthen with informed experts the argument, always powerful, for stability, and the prevailing mood favouring "reconstruction"

accords rather than conflicts with the advocacy of this special change in a dominant department of our economic life.

For on the sure, smooth revolution of the mechanism of the currency the prosperous advance of industry and commerce is dependent, and a bad or an imperfect monetary system saps the vitals of a nation's trade as it impairs the equity of bargains. We cannot but be confident that, in some such direction as Professor Irving Fisher points, the desired stability of the monetary standard will eventually be gained. He distinguishes three "milestones" on his road. The first is the "general support of economists," and that he claims he has passed. The second, which he hopes is now being left behind, is the "general approval of the business and industrial world." The third and last is the adoption of this or of some similar plan by men in political life. It is a tolerably certain sign of progress when the *Times* at the conclusion of a leading article, refers, as the other day, to a goods standard, like that urged and explained by the Professor, as undoubtedly entitled to a place in the discussion of the omitted present currency situation. It should not, we believe, be from the programme, supported influentially, of rehabilitation of the gold standard; and for that reason we have been anxious to discharge the duty here of pressing, with all the earnestness at our command, on the readers of the ECONOMIC JOURNAL the careful study and friendly scrutiny of Professor Irving Fisher's scheme as set forth in rounded mature shape in the special book to which we have referred.

L. L. PRICE

MR. AND MRS. WEBB ON CONSUMERS' CO-OPERATION [1]

IN *The Consumers' Co-operative Movement* Mr. and Mrs. Webb have added yet another important work to their wonderful series of social studies. There is the same clear arrangement, the same power of lucid narrative, the same mastery of detail and boldness of generalisation that distinguish *Industrial Democracy* and its numerous companion volumes. It is not necessary to agree with the authors' conclusions or analyses—and, indeed, there is much with which the present writer does not agree—in order to recognise the high service that they have rendered, and are still rendering, to social science. Economists of a different school, or, more properly, a different method of economic thought, will not be the last to offer their tribute of respectful congratulation.

The Consumers' Co-operative Movement is divided into six chapters, entitled respectively, The Co-operative Store, Federal Institutions, The Co-operative Employees, The Effect upon the Co-operative Movement of the Great War, Some Remediable Defects and Shortcomings in the Consumers' Co-operative Movement and The Future of Consumers' Co-operation. The discussion is concerned in the main with the retail stores and the two Wholesales, together with their associated productive departments and establishments in England and Scotland. Very little is said of the various purchasers' associations to be found among the farmers of Ireland and the Continent. It is recognised that, from one point of view, these might properly be regarded as instances of consumers' co-operation, but for Mr. and Mrs. Webb the essential note of the co-operative movement is the exclusion of private profit-making, and these associations, valuable as they are acknowledged to be, do not pass that test. The authors' analysis rests upon a sharp distinction between " production for use " and " production for profit." That distinction is plausible, but, as I think, in the main illusory. There is not really much to choose between a person—or group of persons—who gets bread by making it himself and one who gets it by making boots

[1] *The Consumers' Co-operative Movement.* By Sidney and Beatrice Webb. (Longmans. 1921. Pp. 504. Price 18*s.*)

for sale at a profit and buying bread with the proceeds. Each alike aims at securing the things he wants; the fact that the process of doing this has a money stage in it for one of them and not for the other is not fundamental. Nobody, of course, would suggest that the distinction has *no* importance. In some circumstances, particularly when monopoly is present, it is very important indeed. But Mr. and Mrs. Webb, and some others who follow them, claim for it a dominant place that not all economists would be willing to concede.

The device of the dividend on purchase has social and economic consequences that have often been described. In this work, however, especial stress is laid upon its effect on the *constitution* of co-operative societies. It is a potent engine for securing complete democracy of ownership and control--and a democracy, moreover, that remains always open to new-comers. Thus, since members are financially interested in their capacity as purchasers and not as shareholders, and since the amounts of their purchases vary, there is no practicable alternative to one man (or woman) one vote. On this basis all the recent developments of constitutional form that have accompanied the enormous expansion in the scale of the co-operators' work have been built up. One important characteristic in which up-to-date societies differ from earlier ones is in the greater continuity of office secured to the committee of management. In one society (the Royal Arsenal Co-operative Society) the old committee has given place to a whole-time directorate of seven persons each paid £100 a year. "This transformation of the executive, in a few of the largest societies, from a committee paid only by fees to a small number of full-time salaried officers is, perhaps, the most momentous of the changes that are now taking place in the constitution of the co-operative societies" (p. 35). The large size of many of the societies has also made necessary some modification in the method of election and of members' meetings. The device has been invented of a series of divisional gatherings, all of which are legally part of a single members' meeting, before all of which identical resolutions and amendments are placed, and the votes obtained added together to produce a decision. In rare cases there is a provision for votes to be taken by ballot without attendance at meetings. There is also to be descried by the discerning student "a first beginning, in the co-operative society, of the characteristic organ of British political democracy, the elected representative assembly, intermediate between the electorate and the executive" (p. 59).

A very important feature of the co-operative stores in their original form was the practice of devoting a part of the accruing surplus to common purposes of a non-economic character. The educational work of the societies has been in part superseded by the universal State provision of elementary education and the widespread provision by local authorities of evening classes and free libraries. But there is still much that co-operators can do. In the big stores, " above the tiers of retail departments and showrooms there will usually be a great assembly hall for the meetings, lectures and entertainments, to which the members resort. . . . There may even be smoking-rooms and billiard-rooms, and certainly a lending library. . . . Not yet common, but now increasingly prevalent, is the maintenance of a country mansion for the use of the members with extensive gardens and playing-fields " (pp. 78–82). These services for the common good are not, however, made use of by more than a very small proportion of the members. There is a tendency in some societies to cut them down. There is uncertainty of aim and infirmity of purpose in educational work and a certain intellectual deadness. To the great majority of the members the societies are merely dealers in household supplies and the source of dividends on purchases. Here Mr. and Mrs. Webb regretfully record " arrested development."

The Chapter on Federal Institutions is largely concerned with the English and Scottish Wholesales, which together supply the stores with about five-eighths of all the goods they distribute. It describes their productive operations at home and abroad, and explains incidentally the comparative failure of the attempt to establish a co-operative shipping fleet. " Experience taught the directors that, whilst they could economically arrange for imports, they are not often in a position to make up full export cargoes, and the co-operative fleet has sunk down to four vessels and ten lighters " (p. 107). The constitution of the Wholesales follows closely that of the stores, but the voting power of the stores that are members varies with the amount of purchases that they make. Alongside of the Wholesale is the " Co-operative Union," which summons and manages the Co-operative Congresses. Mr. and Mrs. Webb consider it desirable that this body should become explicitly a federation of consumers' societies only, instead of also embracing, as it now does, associations of workers organised as producers. This, of course, is an opinion which many friends of co-operation would oppose; holding that consumers' associations should frankly ally themselves with, and lend their strength

to help, these weak but socially valuable forms of workpeople's effort.

Chapter III on the Co-operative Employees and Chapter IV on the effect of the Great War contain much interesting material, upon which lack of space forbids comment here. In Chapter V, under the heading Remediable Defects and Shortcomings, Mr. and Mrs. Webb advance, as friendly critics, a series of practical suggestions. In the final chapter, on the future of consumers' co-operation, they touch in part on ground already covered in *A Constitution for the Socialist Commonwealth of Great Britain.* The keynote is struck early: "Unless we completely misinterpret the essential groundswell of British democracy, it is this consumers' co-operation, in its twofold form of voluntary associations of members (in what we now know as the Co-operative Society) and obligatory association of citizens (in Local Government)—in organic connection with an equally ubiquitous organisation of the producers by hand or by brain (in Trade Unions and Professional Associations)—which will contribute the greater part of the new social order that is destined very largely to supersede the present Capitalistic System" (pp. 383–4). It may well be that this anticipation goes too far. Mr. and Mrs. Webb scarcely attach sufficient weight to the difficulty of securing adequate capital under voluntary co-operation in forms of production that involve large risk; nor to the danger, under obligatory co-operation, of checking enterprise and experiment. Nor is the claim to greater steadiness of production under the co-operative form of industry convincing, if we allow for the fact that, were co-operation universal, there would be no fringe of private producers upon whom the variable part of the demand could be thrown. Nor, again, would "the economists themselves" readily admit parenthood of the doctrine attributed to them on p. 391, that "capitalist ownership and control inevitably mean the abstraction from the actual producers and consumers, in the form of rent, of the differential advantages of all but the worst of the instruments of production for the time being in use." But, whether or not we accept Mr. and Mrs. Webb's far-reaching forecast, there can be no doubt that voluntary and obligatory co-operation have in many fields great advantages, and are likely to play in the future an even greater part than they play now. Particular interest, therefore, attaches to the excellent discussion, beginning on p. 396, of *the relative spheres of voluntary and obligatory associations of consumers.*

At the end of their long study of social machinery the authors

emphatically declare that this machinery is made for man, not man for the machinery, and that the test of a good economic organisation is that it shall leave people time and energy, after their material needs have been satisfied, for the pursuit of higher things. "The final end to be secured by social organisation can be nothing but the largest possible amount of the highest possible development of individual personality" (p. 481). A crude and ambiguous statement this, in which it would be easy to pick holes! But the practical intention is plain, and the emphasis that Mr. and Mrs. Webb lay upon it is well-timed.

A. C. Pigou

RECENT MEMOIRS ON CURRENCY POLICY

Currency Inflation and Public Debts: An Historical Sketch. By EDWIN R. A. SELIGMAN. (New York: The Equitable Trust Co., 1921. Pp. 86.)

The World's Monetary Problems: Two Memoranda. By GUSTAV CASSEL. (London: Constable & Co., 1921. Pp. 154.)

Monetary Policy: Being the Report of a Sub-Committee on Currency and the Gold Standard. By J. H. CLAPHAM, C. W. GUILLEBAUD, F. LAVINGTON, and D. H. ROBERTSON. (London: P. S. King & Son, 1921. Pp. 75. Price 2*s.* 6*d.* net.)

PROFESSOR SELIGMAN'S sketch covers the United States, France, Great Britain, Italy, Russia, Austria, Spain, South America and Japan. It leads him to conclude that public debts are due to war, that the issue of inconvertible paper always ends in depreciation, that the rapid rise of prices caused by large issues of such paper create an illusory prosperity followed by painful disillusionment, that the only ways of escape are (1) reduction of public debt either by (*a*) redemption or (*b*) repudiation, and (2) contraction of currency or stabilisation at a lower level, and lastly, that public debts and currency have become international problems. For getting rid of her present troubles, he says, Europe must have the co-operation of the United States. In the historical sketch he fails, like nearly all historians in this province—Mr. Hawtrey is a recent and honourable exception—to explain what happens to contracts expressed in money when the monetary unit in which people reckon is suddenly made much more valuable. We all know what happens when the unit depreciates or appreciates without losing its identity, but who knows what happened when, for example, the American issues known as Continental were "redeemed in new bills at the rate of 40 to 1" in 1780? Did persons who had contracted a week before, a month before, and a year before to pay 1000 each have to pay 1000 dollars in the new currency, or could they all get off by paying 25 dollars in the new currency, that being equivalent to 1000 in the superseded? Or take the recent and interesting

case of Mexico, which is not dealt with by Prof. Seligman: when the Mexicans gave up paper pesoes as hopeless, and without any Government action suddenly took to reckoning in gold pesoes, did the sponge pass over all contracts, or how were they acquitted? Mr. Hawtrey has told us how in 1797 France and in 1809 Austria arranged for a scale of payments varying with the extent of the depreciation prevailing at the time when the contract was made, but the question whether such an arrangement is possible under modern conditions is always ignored in discussions about the desirability of returning to the old metallic units.

Professor Cassel's first Memorandum, written for the Brussels International Financial Conference, was completed in June 1920, and first published in Vol. V of the Proceedings of that Conference. The second Memorandum was written for the Financial Committee of the League of Nations for its meeting in September 1921; in the Foreword, dated October, the words "not hitherto published in any form" are used, but it was printed in the *Manchester Guardian Commercial* on October 27.

The first Memorandum has become so well known that it is not necessary to say much about it here. It remains the most brilliant and useful contribution to monetary literature made since the outbreak of the Great War. It has helped enormously the very considerable return to sound thinking and sound action which has taken place since the date of its publication. The second Memorandum does not seem quite so successful. Prof. Cassel, while strongly opposed to any inflation being allowed to occur, has always been inclined to acquiesce in the results of any which has actually taken place. This attitude, which made him perhaps a more effective preacher against further inflation by suggesting that his views were moderate, ranged him on the side of the inflationists as soon as the fall of prices set in. He seems to underrate the advantages of returning to the old level of prices, while greatly overrating both the probability of prices falling to that level and the probability of their falling gradually below that level after getting down to it.

To treat a return to a level of prices which existed eight years ago, and from which the maximum departure was two years ago, almost as if it were exactly the same thing as an equivalent fall of prices from a level which had been stable for a century is surely very misleading. In this country and others like it hundreds of millions of fixed sums in money are still being paid annually under contracts made before the War, and these sums are very

largely still paid by and to the same persons. Moreover, the ideas of the people about what is a proper price for commodities and services have by no means altogether accommodated themselves to the higher level of prices. Anything under ten years should be reckoned a "short period" in monetary history, and if we are to acquiesce in every inflation which takes place in less time than that we certainly shall not get stability in the long run. For some compromise between complete acquiescence in the new level and complete return to the old, no doubt there is much to be said when the old level has receded more than three or four years into the past.

In fact at the present time a return to their old gold pars seems to offer a very suitable compromise, at any rate for the countries which have the least depreciated currencies, and when writing his first Memorandum, Prof. Cassel was prepared to grant this, though even then he was somewhat oppressed by the fear that prices reckoned in gold might be too low and might go on falling unless all countries took great care not to demand gold either for circulation or reserves. Before September 1921, however, he became much more alarmed by the rise in the value of gold which had then taken place, and which he puts as high as 75 per cent. in the twelve months. (He says on p. 122 that gold had "lost in some few years perhaps more than 60 per cent. of its pre-war value, and then in one single year recovered something like half this loss," *i.e.* the value fell from 100 to 40 and then went up to 70: from 40 to 70 is a rise of 75 per cent.). This instability of gold he found very shocking, and we are almost tempted to say that the instability of gold infected the stability of his views. The United States, under the guidance of the Federal Reserve Board, becomes a bogey which is set up in the way of those who wish to tread the path which leads to stable money and exchanges. "International relations and the actual situation of the gold market being such as here outlined, it seems to be almost a practical impossibility for any European country, acting alone, to restore a gold standard, even at a reduced parity. This is clear enough so far as the smaller countries are concerned." If such a country by itself attempted to restore convertibility of paper into gold, says Prof. Cassel, "it might quite easily see its whole gold fund suddenly exported to satisfy foreign demands for gold." This is just the kind of thing which used to be said by financial writers who would have liked to see Prof. Cassel's head on a charger. Prudent bankers manage to avoid positions in which they will have to meet inconvenient demands whether

from domestic or foreign creditors; and even if a country's whole gold fund was exported (in exchange for commodities or in payment of obligations), it is certainly not very obvious how its position would be worse than when, as at present, its whole gold fund is locked up in cellars and serves no useful purpose whatsoever—in fact it would be better, since some useful commodities would have been bought or some obligations discharged by the export. Now, towards the end of January 1922, six months after Prof. Cassel wrote, the small country of Switzerland has restored her currency to the old gold standard and kept it there for more than a month, and it seems perfectly possible, and on the whole probable, that, with or without free gold markets, Holland and Sweden, two other small countries, may join her before Great Britain comes in with Australia and South Africa in her train and Canada in front of her.

Another of Prof. Cassel's propositions which it is even more impossible to accept is that the specification of the Reparations payments in gold must have the important and disastrous effect of raising the value of gold. None of the governments which are hoping to receive these payments will refuse to receive them in their own currency, and all that the specification of gold means is that the quantity of that currency which they are to receive will vary with the varying gold value of the unit of that currency. "A milliard of gold francs" means to the Frenchman two milliard francs when the franc is worth half its old gold value, and means four milliards when the franc is worth only a quarter. To say that reckoning in gold must raise the value of gold seems to be much like saying that the value of gold must have been greatly raised by the rupee having been on a gold basis from 1897 to 1914, since it caused all payments in India to be reckoned in a rupee equal to one-fifteenth of a sovereign.

When we ask to what practical conclusion Prof. Cassel is leading us, we find that he wants us to believe that co-operation between the different countries is an absolute essential for a solution of the present monetary difficulties, and that the first step is "to refer the whole problem"—*parturiunt montes*—"to a small committee of experts." A better conclusion, attaching a modern tail to an old proverb, is that Heaven helps those who help themselves and hang committees.

Which leads us by a natural and easy transition to the consideration of the third of the little books of which the titles head this notice. The Sub-Committee responsible for it was appointed by the British Association's Committee on the "Effects of the

War on Credit, Currency, Finance and the Foreign Exchanges," and consisted of Dr. Clapham and Messrs. C. W. Guillebaud, F. Lavington and D. H. Robertson. It reported to Section F at Edinburgh last September, but the Section, which had not had any opportunity of reading the Report, declined to be committed by it, so that it has been published, as the title-page says, by the individual members of the Sub-Committee. The Section's caution was prudent, but there is nothing very dangerous in the Report.

Part I, by Dr. Clapham and Mr. Guillebaud, brings together the British statistics for banking currency, national debt, foreign trade and prices in a way which makes them as little repulsive as possible to the average man. I doubt, however, if the banking figures can be explained without more inside knowledge than the authors possess. They ignore altogether the "Special deposit" system under which the Bank of England collected large sums from the other banks and handed them to the Government without putting them into "Other deposits" and "Government securities" in its weekly return, though the Government put them into "Ways and Means Advances from the Bank of England," thus appearing to borrow from the Bank money which the Bank had not lent—a thing suggestive of certain Divorce Court decisions. Whether the plan was adopted merely to prevent the Bank of England's reserve percentage looking so small as it would otherwise have done, or for some other reason, or whether it simply grew up in consequence of some accident, has never been explained. Nor has it been stated under what head these amounts appeared (or rather were concealed) in the other banks' accounts. But the enormous drop of "Money at call and short notice" from £275·6 m. at the end of 1918 to £150·6 m. at the end of 1919, accompanied as it was by an increase of £89·5 m. in "Cash in hand and at Bank of England," certainly suggests that it was classified as money at call or short notice, since it was in 1919 that the system was abandoned. The Report can only suggest that the drop was "probably due in the main to the extra demands made by Industry, and to the credits extended to customers to buy Funding Stock." It is characteristic of the somewhat airy manner of the authors that they do not ask from whom the £125 m. was withdrawn.

On p. 23 silver is mistakenly included as "cover" which is reckoned in calculating the limit of the fiduciary issue of Currency notes, and it is misleading to say, "In order to maintain this limit, Bank of England notes were transferred from the Bank's

reserve to the currency note redemption account as further increases were made in the currency note issue." There is no ground for believing that if the £19,450,000 Bank-notes were not locked up in the Currency Note vault they would be in the Bank of England reserve: it is much more likely that they would all be in the "active circulation." To say that they were "transferred from the Bank's reserve" disguises altogether the true nature of one of the oddest of post-war monetary transactions—the issue of £19,450,000 in notes for £1 and 10*s.* (and in certificates entitling the holders to such notes) in order to acquire and hold, or at any rate with the result of acquiring and holding, £19,450,000 of Bank notes for £5 and upwards. The only thing which could justify such a transaction would be some change which caused banks and individuals to want to hold more small notes in proportion to large ones, and there is no reason for supposing any such change in the months of 1920 during which most of the transaction was carried out. In the absence of such a change it is clear that as it was possible for the Treasury to acquire and store up £19½ m. in large notes, it could, if it had chosen, have adopted instead the simple and more economical course of issuing £19½ m. less of the small notes. Happily, whether owing to a change of men or of mind, the absurd policy of paying out Currency notes and buying in Bank notes with them has long been abandoned, though it is still perhaps too much to hope that its memory may soon be blotted out by the Treasury sending in the Bank notes to the Bank to be cashed in gold, adding the gold to the £28½ m. of gold at present held, doing away with a stupid double reckoning which unnecessarily increases the apparent total amount of the paper currency, and dispensing with a line in the weekly Currency note account.

The current topsy-turvy doctrine represents banks as getting more deposits the more they lend, instead of vice versa, but it is surely carrying this unusually far when the authors of Part I attribute the "maintenance of a very high level of deposits" partly to "the large amount of long-term credits to foreign firms which the exceptional conditions of the period made it impossible to call in." Lend largely to foreigners who can't pay you back, and your deposits will grow!

The section on Foreign Exchanges and the Balance of Trade smells somewhat of mercantilism.

In Part II Mr. Lavington aims at answering "the fundamental question: What price level is now desirable in the general interests of the community?" *i. e.* the people of the United Kingdom, but

adds a gloss, "Would it be higher or lower than the post-war level, and by how much?" which involves him in a wholly unnecessary and confusing investigation of the question, "What *is* the normal post-war level?"

The post-war level is, the reader will at once object, likely to be affected by action adopted in consequence of views held about what it ought to be. A thorough inflationist policy on the part of the Government and legislature, acquiesced in by the people, could raise the price level in this country to the dizzy heights attained in Russia and Austria, and a thorough deflationist policy could similarly bring it back easily to gold level, and with a little difficulty to a still lower level. Why then does Mr. Lavington ask whether the desirable level is higher or lower than *the* post-war level? The other collaborators in the Report seem to have scented a difficulty and tried to meet it on p. 8 by substituting "that post-war level which, in the absence of deliberate action, may be expected to establish itself" (cp. p. 66, bottom). Are we back in the middle of the eighteenth century, hankering after the rule of Nature? We are reminded of Quesnay's motto:

Ex naturâ, jus, ordo, leges,
Ex homine, arbitrium, regimen et coercitio.

But did Nature prescribe the Bank Charter Act of 1844? or the Currency and Bank Notes Act, 1914, which gives the Treasury power to issue unlimited amounts of Currency notes and to authorise the Bank to issue unlimited amounts of Bank notes? or the Gold and Silver (Export Control, etc.) Act, 1920, which virtually annuls the convertibility of the Bank and Currency notes? or the Treasury Minute of 15th December, 1919, in which "directions" are given to the Bank, as the agent of the Treasury, to limit the issue of Currency notes in such manner that the fiduciary portion shall never exceed the maximum attained in the preceding calendar year? Perhaps it will be answered that the maintenance of the existing law and regulations is deliberate inaction rather than "deliberate action." But this will not do. The one thing on which all schools are agreed is that even within the present law and regulations, the action of the Government affects the purchasing power of money. The Treasury cannot avoid deciding every week whether it will arrange for meeting its expenditure by the aid of an increase of notes issued or in spite of a decrease of notes. In the course of a year it has redeemed £50 m. of notes, giving its subjects in exchange £50 m.

of interest-bearing securities. Can any one say that is not "deliberate action," or that prices are not affected by it?

However, the post-war level is put by Mr. Lavington at 240 per cent. by the *Times* index number. He arrives at this figure by regarding the top, 329, reached in April 1920, and what he seems to have thought the bottom, 189 in April 1921, as both abnormal, and then splitting the difference, but supporting the guess by an estimate of "purchasing power" existing at the moment of writing, without, apparently, asking whether this, too, might not be abnormal. He then discusses the advantages and disadvantages of a higher or lower level fairly enough, but without arriving at any positive conclusion whether it would be better to aim at something different from 240.

In Part III Mr. Robertson argues very sensibly in favour of the restoration of the gold standard as a "respectable interim measure" pending the evolution of some better standard. He justly rejects the policy of reducing the amount of gold in the sovereign "except as a last resort," in case of dire necessity. He deprecates any attempt to bring down prices further, but recommends sharp resistance to the rise which may be expected at the end of the depression, and hopes that this may put the level of prices here on an equality with the gold prices of the countries already on a gold standard, and so bring us back to the old parity by a method actually advantageous in itself, as it involves use of the one real prophylactic against depressions, the damping down of the preceding boom.

EDWIN CANNAN

THE INTERNAL PURCHASING POWER OF THE GERMAN MARK (II)[1]

THE depreciation of the mark has proceeded with immense rapidity since the middle of the year 1921. The continued deficit led to an extraordinary fall in the German rate of exchange, that is, of the value of her money abroad. This circumstance, together with increased inflation --sometimes over four milliard paper marks per week were brought into circulation-- caused a considerable decrease in the value of money at home, although the internal value only followed the value abroad with a lag.

During the second half of the year 1921—

The £ rose from 280 to 780, *i. e.* nearly $2\frac{3}{4}$ times (after a temporary rise to four times).

The wholesale trade figure rose from 135 to 320, *i. e.* nearly $2\frac{1}{3}$ times (*Frankfurter Zeitung*).

The cost of living rose from 293 to 439, *i. e.* nearly $1\frac{1}{2}$ times (Elsas).

The movement of the various German calculations of the cost of living during the second half of 1921 was, in detail, as follows.

(1) *The index figure of Richard Calwer (weekly food requirements)* :—

January 1st,	1914	25·57	October 1st,	1921	418·42
July 1st,	1921	359·04	November 1st,	,,	473·89
August 1st,	,,	395·96	December 1st,	,,	514·63
September 1st,	,,	399·59			

(2) *The index figure of the Statistical Bureau of the Realm for the Cost of living* :—

Average price figure 1913–14			100	October 1st,	1921	1,146
July 1st,	1921	...	963	November 1st,	,,	1,397
August 1st,	,,	...	1,045	December 1st,	,,	1,550
September 1st,	,,	...	1,062			

[1] Supplementary to the article in the ECONOMIC JOURNAL for September 1921, p. 320.

(3) *The index figure for the cost of living to a family of four (for Frankfurt a. Main, Berlin, and the most important industrial towns in the Realm), by M. Elsas :—*

January 1st,	1914	26·5	November 1st,	1921	382
July 1st,	1921	293	January 1st,	1922	439
September 1st,	,,	319			

(4) *The cost of food requirements according to the Berlin Statistical Bureau (Silbergleit).*

The weekly cost of food requirements :—

Per head for adults.			For husband, wife, and child from 7 to 12 years old.		
Middle of July—Middle of August	1919	26·55	July	1921	130·46
July	1921	59·75	August	,, ...	137·47
August	,, ...	61·58	September	,, ...	142·56
September	,, ...	64·43	October	,, ...	154·13
October	,, ...	69·37	November	,, ...	179·08
November	,, ...	87·56	December	,, ...	191·50
December	,, ...	92·59			

(5) *The wholesale trade figure of the "Frankfurter Zeitung" :—*

Middle of	1914 ...	8·9	October 1st,	1921 ...	184
July 1st,	1921 ...	135	November 1st,	,, ...	249
August 1st,	,, ...	160	December 1st,	,, ...	303
September 1st,	,, ...	164	January 1st,	1922 ...	320

Summary.

Index figure.		Date.	Increase (approximate).
Calwer.	Food-stuffs only.	Between Dec. 1921 and Jan. 1914	20 times
Statistical Bureau of the Realm.	The most important necessities without clothes.	Between Dec. 1921 and 1913–14	15½ ,,
Elsas.	All important necessities.	Between Jan. 1st, 1922 and Jan. 1st, 1914.	16½ ,,
Silbergleit.	Food only.	Between Dec. 1921 and July–Aug. 1919.	3½ ,,
Wholesale trade figure of the *Frankfurter Zeitung.*	All important necessities.	Between Jan. 1st, 1922, and peace time.	36 ,,

The mean value (the arithmetical mean) of Calwer's figure and the index figure of the Realm for January 1922 agrees approximately with the index figure arrived at by the writer for the cost of living, substitution being taken into account. Elsas's index figure for the total cost of living gives 16½ times that of peace time; accordingly the value of money at home is 1/16·5, and, if substitution is taken into account, which involves a

diminution of 10 per cent.,[1] 1/18·3, that is 5·5 pfennigs for the mark.

Calwer's figure for food-stuffs amounts to twenty times that of pre-war days. The index figure for the Realm (whole cost of living without clothing) amounts to $15\frac{1}{2}$ times that of pre-war days. The arithmetic mean of the two figures is 17·75 times. According to this the value of money at home is 1/17·75, or 5·6 pfennigs for the mark.

It is of further interest to note the conformity in the degree of increase in the various index figures, in spite of the wholly different range of necessities to which they apply. At the end of December all the index figures had risen by almost exactly 50 per cent. in comparison with July 1st, 1921, with the exception, of course, of the wholesale trade figure, which had risen by 140 per cent.

Let us now examine the circulation of notes of the Reichsbank during the same period (the second half of 1921).

The note circulation of the Reichsbank (in millions of marks) amounted :—

On June 30th, 1921	to	75,321
,, September 30th, 1921	,,	86,384
,, December 31st, 1921	,,	113,639

Increase since June 30th, 50 per cent.

The circulation of bank notes and treasury notes together (in millions of marks) amounted :—

On June 30th, 1921	to	84,028
,, September 30th, 1921	,,	93,994
,, December 31st, 1921	,,	121,964

Increase since June 30th, 45 per cent.

And if, finally, we examine the movement of account settlements through the Reichsbank during the same period (in millions of marks) :—

July	1921	78,337	October	1921	119,496
August	,, ...	79,172	November	,, ...	140,493
September	,, ...	98,004	December	,, ...	120,835

Increase since June 30th, 54 per cent.

Thus the note circulation of the Reichsbank has also increased by almost exactly 50 per cent. The same applies, with rather less steadiness, to the settlement of accounts through the Reichsbank. Here, too, the increase in December amounted to about one-half in comparison with July 1921, but in November it considerably exceeded that proportion. But it must be expressly stated

[1] Compare the September number of the ECONOMIC JOURNAL; M. Elsas, "The Internal Purchasing Power of the German Mark" (1921).

that the increase in account settlements through the Reichsbank must not be interpreted so simply as, for instance, that of the note circulation.

This conformity in the economic curve relating to the increase in note circulation and the increase in the cost of living is somewhat surprising. For it is known that the amount of money in circulation is only one of the factors which determine the level of prices at home. But the equally important factor, the balance of receipts and expenditure, which, as we know, is no less significant, does not yet find expression in the increase in the cost of living for the second half of 1921.

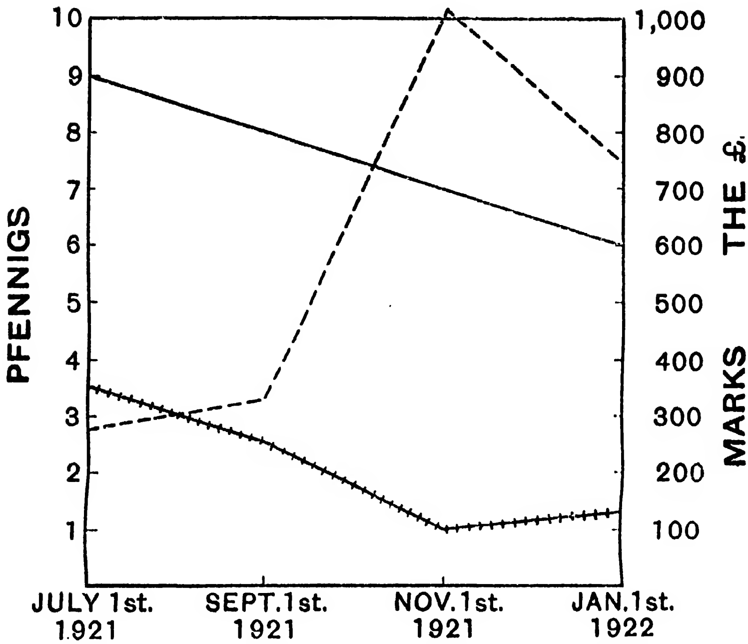
This apparent contradiction is resolved if we consider the wholesale trade figures more closely. In the third quarter of 1921 they rose barely 40 per cent., but in the fourth quarter of 1921 they rose about 100 per cent. in comparison with July 1st, 1921. In other words, the falling rate of exchange, which began in the second half of 1921, already finds expression in the wholesale prices (as distinct from the retail prices) in the fourth quarter, and these facts justify the conclusion that retail prices, and consequently the cost of living, may be expected to follow the increase to a certain extent in the first quarter of 1922.

Foreign Value of the Mark.

	Rate of Exchange to the £.	British *Labour Gazette* Index Number.	Column 2 × 3.	Purchasing power of the mark in relation to cost of living in in England.
July 1921	280	219	616	about 3½ pfennigs
August „	308	222	684	„ 3 „
September „	390	220	858	„ 2½ „
October „	582	210	1,122	„ 1⅔ „
November „	1,041	203	2,132	„ 1 „
December „	770	199	1,533	„ 1⅓ „

Value of the Mark at Home.

	Index figure for the cost of living (Elsas).	Increase compared with 1914.	Purchasing power of the mark in relation to cost of living in Germany.
January 1st, 1914	26·5	—	about 100 pfennigs
July 1st, 1921	293	11 times	„ 9 „
September 1st, „	319	12 „	„ 8 „
November 1st, „	382	14·4 „	„ 7 „
January 1st, 1922	439	16·6 „	„ 6 „



——— Purchasing power of the mark in relation to cost of living at home.
-++-+- Purchasing power of the mark abroad in relation to cost of living in England.
- - - - - - Rate of exchange (exchange value of the mark in England).

In the above comparison the violent change in the value of money abroad and the relatively calm change at home are especially characteristic. The home-value of the mark has diminished from July 1st of last year to January 1st, 1922, at intervals of two months by about one pfennig each time, from 9 to 8, to 7, to 6 pfennigs. A decrease which absolutely is steady involves, of course, a relatively progressive decrease.

This relatively rhythmic course results from the principle of inertia, which characterises the value of money at home, in so far as it is based upon retail prices in the case of the cost of living. The principle of inertia results here from the endeavour of retail trade to avoid violent changes in price. Since the adaptation of retail prices to the changes in the value of money abroad is specially delayed, as we have ascertained, this fact enables us to foresee already that, even if the rate of exchange does not alter in the near future, a further fall in the value of money at home must nevertheless occur.

This tendency on the part of the value of money at home to fall further will be reinforced if, as is to be expected this year, the process of adapting the prices of important necessities to

world prices continues; for instance, bread, coal, railway rates, and postage. There is in addition the increased tax on sales.

Let us assume that in the near future this adaptation is completed, though gradually; two factors then finally remain which will raise the value of money at home above its value abroad for some time to come, even with a stable rate of exchange. These factors are, first, house-rents, which will not be adapted wholly to the depreciation of money within measurable time in consequence of their still quite disproportionately low rate (at the present time rent amounts only to $2\frac{1}{2}$ per cent. of the whole cost of living, in comparison with an average of 20 per cent. in pre-war times).

Then there are wages, which, even taking into consideration the greater purchasing power of the mark at home, are still very low: a phenomenon which has clearly accompanied paper inflation at all times and among all peoples.[1] The primary cause of this slow movement of wages is no doubt to be attributed to the fact that the privations which long wars bring upon peoples cut off from the world market usually greatly depress the standard of living of the masses, and its recovery proceeds but slowly.

Then a part is also played here by the psychological factor involved in the nominally large sums paid in wages. And, finally, every rise in wages is immediately overtaken by a fresh rise in the level of prices (and thus a fall in the value of money), because increased wages offer a welcome excuse for fresh increases in prices, whilst in reality wages, as a passive element, have no causal significance in the vicious circle.

But even this partial approach of the value of money at home to its value abroad involves the assumption that no additional mistrust of German currency— no fresh crisis of confidence—such as occurred in the second half of last year, further depresses the value of money abroad, thus constantly overtaking the process of adaptation of the value at home.

So long as the present condition of violent fluctuations in the exchange continues, even the best will to keep pace with world prices will be in vain. We may take coal as an example: in the summer its price was nearly the world price, but in the autumn, in consequence of the rapid fall of the mark, it sank much below half the world price.

If a stable exchange were unattainable, automatic regulation of the price of coal, and accordingly of the coal tax, say from

[1] In France at the beginning of the year 1792, when the value of money stood at only 70 per cent., wages appear to have remained at the level of 1788 (compare I. Fisher, *The Purchasing Power of Money*).

month to month according to the rate of exchange, might solve this difficulty, but such uncertainty concerning the most important raw material would be intolerable for industry and trade, upon which presumably the risk would be thrown.

And finally we come to the main question : in which direction will the rate of exchange of the mark move? This question involves a complexity of questions.

Let us pick out only a few factors; will the printing press be brought to a stand-still? That is, will not only the budget of the Realm be made to balance, but will the balance of German receipts against expenditure cease to be adverse? The answer to this question depends in the first instance upon whether those who rule the destinies of the nations are able to realise the inevitable, but often disregarded, nature of economic processes. Or will those prove right who believe that they have learnt from the economic history of the world that, when a currency has passed a certain low level, it is no longer practicable to count on its recovery- in spite of all theoretical possibilities? And finally, in connection with this, is Gresham's law incorrect in the long run? Does, then, bad money not oust good in the end, but will a contrary tendency set in? It must be said with regard to the last question, that perhaps economic laws, like physical laws,[1] only hold good with precision within certain limits, whilst in certain extreme cases there are exceptions.[2]

May Germany and the world be spared the fate of proving the correctness of this theory.

M. ELSAS

[1] Edwin Cannan, ECONOMIC JOURNAL, December 1921.

[2] Thus, for example, in certain extreme cases exceptions to the Gay-Lussac, Boyle-Mariotte laws concerning gas appear, so that it becomes necessary to formulate a fresh law for these cases.

REVIEWS

The Political Economy of War. By A. C. Pigou. (London: Macmillan & Co., 1921. Pp. 251.)

The subject of this book is brought into clear relief by the distinction which is drawn in the Introduction between the "cool rhythm of a settled order" and the "strained and stressed economy of a world-shattering war." The latter subject might seem not peculiarly adapted to the powers of abstract reasoning which Professor Pigou evinced in his *Wealth and Welfare* and other pre-war writings. He has, however, successfully handled problems relating to war in his *Economy and Finance of the War*, reviewed in this Journal, 1916, in several articles contributed to the Journal, and other recent writings. Many of the arguments first presented in these publications are restated in the pages before us in a clear and simple form, divested of details and technicalities. We venture to suggest that in a second edition there might usefully be appended a list of references to the author's writings which are put under contribution in the present study. The student would be assisted thereby, and the general reader would not be incommoded.

Of the numerous points which are either usefully retouched or freshly handled in the work before us, we can only indicate a few specimens. Following an order which the author seems to have had in mind, we may separately consider the periods before, during, and after a war—*the* war we might almost say, as Professor Pigou writes with special reference to the Great War and the experience of this country.

Among the antecedents of war is the shadow which the coming event casts: the losses due to the diversion of productive resources from applications which but for the prospect of war would be the most advantageous. Universal conscription is a conspicuous example of loss to industry. Professor Pigou argues: "Whatever benefit to future efficiency may result from military training is probably more than outweighed by the loss of the corresponding benefit that would otherwise have resulted from industrial experience." Perhaps he has not sufficiently taken

into account the educational advantages ascribed by Adam Smith to military training. Other examples of resources diverted from production are the protection of "key-industries" (well defined by our author), the development of agriculture to secure the supply of food in time of war, beyond the point which would otherwise have been advisable, the modification of mercantile marine to suit the exigencies of war.

The antecedents which it specially concerns us to examine are the preventible causes of war. Professor Pigou does not hold with the *simplistes*—not to say simpletons—who maintain that economic motives are the sole cause of war. "The desire for gain," he points out, "is not the only ferment that makes for international war." The lust for domination, the love of liberty, these and kindred potent motives are not ignored by him. But the present study is confined to the discussion of economic causes. Of these the most important is the influence of financiers seeking concessions in undeveloped countries. An international agreement to open the foreign possessions of European Powers to the traders of other countries on equal terms with the traders of the possessing Powers is a desideratum. International agreement is also invoked to check another cause of war, the private interest of armament-makers. But it would not be safe for a Government to take the industry into its own hands without an international understanding. The difficulty of adequately expanding production in wartime would otherwise be too great.

Ardently as our author desires to avert war, he is not to be ranked with the pacifists who counsel non-resistance even in case of a hostile invasion (cp. Hon. Bertrand Russell, *International Journal of Ethics*, 1915, p. 139). So we infer from his giving directions for the utilisation of a country's resources with a view to efficiency in war. We may begin with the rules which refer to the conduct of individuals rather than that of Governments. If a person has resolved to cut down his aggregate expenditure by £100, or £1000, it makes a difference on what branch of expenditure he economises. If he sets free chauffeurs and young able-bodied men fit for military services, he contributes more resources to the service of the country than if he abstained from the purchase of lace (Ch. VI). Indeed if he obtains funds to pay subscriptions to War Loan by cutting off gifts, pensions to old servants, and the like, he is said not to be economising at all, not to be shouldering any part of the State's burden (p. 47).

The Government may, of course, promote and direct personal

economies by judicious regulations. Of such is the rationing of consumers. On what principle should rations be allocated, as between the rich and poor, for instance? The analogy of taxation suggests the issue between *equality of sacrifice* and *minimum aggregate sacrifice.* Professor Pigou decides in favour of the latter principle. The record of the difficulties which rationing involved during the War seems fatal to the project, entertained by some socialists, of continuing the practice in peace time. There is a connection not generally understood between the rationing of consumers and the control of prices. Rationing is required not so much to prevent the rich obtaining an undue share of a limited supply, as to prevent the chaos which would ensue in a competitive market when price is fixed below the point at which the demand just takes off the supply. The number of adjustments required for the limitation of prices is bewildering. Account must be taken of the various grades of quality into which, often under the same name, a commodity is divided. Differences of time and of place require attention. The evasions of the middleman must be defeated. And ever there is the danger of seriously restricting production. The chapter on price-control should be pondered by those who in the cause of Protection or of Communism would manipulate the tangled skein of interdependent prices.

What the consumer gained by the limitations of particular prices he often lost by the rise of general prices during the War. The process by which this rise was effected has long eluded inquiry. The best analysis of the process known to us—a simple, clear, concise and authentic description—is given in Professor Pigou's chapter on Finance by Bank Credits. As we understand, the purists who contended that the processes employed by the Government came to the same as the simple use of the printing press were nearer the truth than the apologists of the Government. The principal difference between currency notes and mere paper-money consists in the incident that the notes when returned to the Bank of England automatically expire. How far does this difference lighten the injury to the public, and the responsibility of the Government?

The expansion of bank credits which led to a rise of prices was aggravated by the methods pursued in raising loans. But loans are not open to the objections which are brought against them on the ground that they sacrifice the future to the present. The correct doctrine is restated by Professor Pigou, with explanations which should obviate captious misunderstandings. Some

indirect burden to the future is no doubt caused by loans so far as the rich relieved from the present payment of taxes make less provision for the future than would otherwise have occurred. The fact that generally, though not necessarily, the burden of the rich is lessened, that of the poor increased, by the use of loans rather than taxes forms a strong argument in favour of the latter alternative. But in a great war " taxation alone, however excellent it might be in theory, is in practice out of the question." As to the principle on which the burden of taxation in war-time ought to be distributed, we understand our author to prescribe *minimum aggregate* rather than *equal* sacrifice, and that with less reservation than is necessary in the regime of peace. " In a pre-eminent national emergency the call from each should be for his *utmost* rather than for his share."

We pass over many other interesting recommendations, hoping that they will not be again required in practice.

In the period after the War we meet problems of present interest. Under the heading, "Aftermath in Currency and Exchanges," Professor Pigou explains lucidly the mechanism of the exchanges, and balances the arguments for and against deflation. He considers whether we should "devaluate" our currency by making the paper pound convertible into a smaller quantity of gold than before the War. He regards the question as one of degree. Seeing that our paper is now only depreciated as compared with gold by some 20 per cent., " the balance," he thinks, "is in favour of an ultimate and not too long delayed return to pre-war parity." So Ricardo argued in 1822 (June 12). " If in the year 1819 the value of the currency had stood at 14*s*. for the pound note, he should have thought that upon a balance of all the advantages and disadvantages of the case it would have been as well to fix the currency at the then value; but when the currency was within 5 per cent. of its par value . . . they had made the best selection in recurring to the old standard."

The authority of Ricardo may also be invoked for the plan of a capital levy which our author defends with many persuasive arguments new and old. But we are not quite persuaded by his reply to the objection that there would be created a dangerous precedent, that the expectation of renewed levies would check saving. " It is arguable," says Professor Pigou, " that when once a levy had been actually made, people would feel that things were settled, at all events for a considerable time, and would therefore be actually less fearful of the future than they are at present."

With respect to sequels, as well to antecedents, the author is confined to the discussion of economic problems. He does not ignore the aftermath of war outside the economic sphere—"the accumulated suffering in wounds and disease of many who go to fight, the accumulated degradation in thought and feeling of many who remain at home."

F. Y. EDGEWORTH

A Revision of the Treaty, being a sequel to the Economic Consequences of the Peace. By JOHN MAYNARD KEYNES, C.B. (London: Macmillan & Co., Ltd. Pp. viii + 223.)

THIS is in some ways an even better book than its predecessor. It is as closely packed with valuable information, as excellent a model of limpid exposition, as deadly in the devastating verbal parsimony of its attacks; and it forms on the whole a more compact and well-ordered unity. If it is, in current jargon, less epoch-making, it is because events, of which the publication of *The Economic Consequences of the Peace* was not the least, have done their work; and the vitalising paradoxes of two years ago have become the dreary platitudes, or even the dangerous half-truths, of scared captains of industry and belated politicians.

After a little political philosophising, Mr. Keynes gives us an extremely useful summary, well documented in an appendix, of the course of events since the signing of the Treaty. He passes on to discuss the nature and effects of the London settlement of May 1921, the impracticability of which was brought home to the world, almost simultaneously with the publication of this book, by the arrangements provisionally substituted for it at Cannes. He then re-examines, in the light of fresh evidence, the question of the amount of Germany's liabilities under the terms of the Armistice and the Treaty of Versailles respectively, and finds no reason to depart from his previous conclusions. Finally, he elaborates his own proposals for the settlement of Europe, which amount to the payment by Germany of an annuity of £54 m. (gold) to France and £9 m. (gold) to Belgium for thirty years, coupled with the remission by Britain and America of the war-debts of the Continental Allies, and special but moderate assistance for Austria and Poland. It would be hard indeed to devise a scheme at once simpler and more effective.

From the point of view of the general economic reader two portions of the book are particularly illuminating—the excursus

on the mark exchange, and the chapter on Reparations, Inter-Ally Debt and International Trade. What are the causes and effects of the depreciation of the mark? How far is the payment of an indemnity or the repayment of debt necessarily injurious to the receiving country? In discussing these questions Mr. Keynes, in the words of a once famous detective story, "takes hold of his reason by the right end," and steers us through conflicting sophistries with an unerring hand. No better example of economic method, of the marriage of reason with fact, could be found.

One word of criticism and one of special approval remains to be said. In discussing the fate of Upper Silesia, Mr. Keynes might perhaps have given more weight to the view that to draw frontiers mainly on economic grounds may serve only to aggravate the tendency, already disastrous enough, to identify political boundaries with economic barriers. In any case it seems a little unkind first to blame the Versailles statesmen for their neglect of economic considerations, and then to twit the League of Nations on the "complicated economic provisions of doubtful efficiency" embodied in the Silesian settlement.

But finally, the triumph of Mr. Keynes' economic views has not led him to withdraw into a discreet shade the moral aspects of his case. He examines fully the legality of the claim upon Germany for war-pensions, and of the occupation of her territory beyond the Rhine—in both cases with very damaging results. "We reserve," he says, "the whole stock of our indignation over illegality between nations for the occasions when it is the fault of others." This kind of thing needs saying now that economic sanity has become fashionable no less than in the good old orange-squeezing days of 1919.

D. H. ROBERTSON

The Economics of Everyday Life. By SIR T. H. PENSON. Part II. (Cambridge: The University Press. 1921. Pp. x + 111. 8vo. Price 4*s*. 6*d*.)

BEFORE the war, in 1913, the author of this volume published Part I of what he has described as a "first book of economic study"; and a manual, in which no pains were spared, by a full well-designed table of contents, by clear and very simple statement in the text, and by the abundant opportune help of leaded type and illustrating "graphs," to meet the primary needs of

teachers and their commencing pupils, has had, we understand, the deserved success of several editions. It has been prescribed, with satisfactory result, for such examinations as those held by the Oxford Delegacy of Local Examinations. The first part having dealt with "effort, exchange and income," the present second part, plotted and executed on lines similar to those pursued before, shows how the income obtained is applied to the "satisfaction of human wants," for the whole work, properly, "aims at being an explanation of the economic relation" between what Bastiat pithily summed up as the subject of Economics in the order of actual occurrence and fit discussion—namely, "wants, efforts, satisfaction." A "short account" is also comprised of the "economic wants of the State and how they are supplied," and of the "aims and methods of various forms of association, such as Trade Unions and Co-operative Societies."

Not a few elementary manuals or introductory text-books, both on economic theory and on economic history, have been published recently, and, while we sometimes wonder whether all can fill a gap, yet their very multitude is an encouraging sign that publishers feel a growing demand for such literature by a widening public. The war, too, with its puzzling and not very welcome "aftermath," has stirred a lively interest in many economic matters on which the competent use of systematic thought should throw needed bright light. Sir Henry Penson is an equipped student and a skilled teacher of economic science, and, as the administrator of a War Department, he has been enabled to add the great advantage of close experience of practical affairs.

Yet, were we disposed to be critical, we might find in this second portion of his manual too much rather than too little reference to what we judge must afterwards be viewed as the passing incidents of a temporary crisis. We think too that, compared with the earlier part, the first subject treated here lends itself less readily to the method followed. It is, we fear, intrinsically more difficult, and in a sense the ordinary ground of economic theory was covered in Part I. Nor does our author escape the dilemma by which expositors of economic principles have been beset, of including, or excluding, the topic of taxation. That, arbitrarily settled by comparison with the regularly working motives affecting value, rent, interest, profits and wages, has yet a traditional right to a place in a text-book, or at least in an appendix. But the discussion of Trade Unions and Co-operation, in spite of their undoubted interest and agreed importance,

will not, we have some misgiving, be immune from a suspicion of being added as "padding" complement rather than as forming an integral portion of a whole. We would offer, lastly, a hint that in a fresh edition some graphical illustration in the shape of a curve or curves should be given of what must present, as we conceive, somewhat formidable difficulty for most readers of a "first book of economic study"—namely, the index numbers that are used to indicate the general level of prices.

But these are minor blemishes and should not interfere with our congratulation of Sir Henry on the successful finish of his useful work. We will anticipate for his Part II a sale not much, if at all, less large than that achieved and earned by Part I. Such a response must be gratifying to the author; and it rejoices those who have at heart the wide diffusion of elementary economic knowledge.

L. L. Price

Problemi Sociologici della Guerra. By Professor Corrado Gini. (Bologna: Zanichelli. 1921. Pp. 390.) Price 32 lire.

This book consists of a number of essays previously published by the author between January 1915 and April 1920. The problems discussed are various, but all either arise out of, or are suggested by, the war. In his preface Professor Gini expresses the hope that, in spite of the political interest of much of his subject matter, his method of treatment will not be found lacking in the scientific spirit. His hope is abundantly justified. "Scientific serenity" (*serenità scientifica*) pervades the book. There is hardly a hint anywhere that war is a beastly business or that it is ever any one's duty to try to prevent it. Such reflections, in a society based on division of labour, are left to the poet, the politician and the preacher.

Most of these essays are statistical studies, on infantile mortality during the war, on the effects of military service upon health and upon size of families, on the cost of the war, on the assessment of war damage, on the amount of indemnity to which Italy is entitled, on methods of estimating national wealth, and so forth. These contain many interesting and suggestive ideas and are, for the most part, models of lucidity. But occasionally one is in doubt as to what precisely is intended. On pp. 377–8, for example, Professor Gini, after dwelling upon the increasing burden of a public debt when prices are falling, suggests that payments to the creditors of the State should vary with the general level of prices, like wages on a cost-of-living sliding scale.

But it is not clear whether he means that war loans should, in the past, have been issued subject to this condition (for which there is a good deal to be said), or that this condition should now be suddenly introduced (which would involve partial repudiation and discrimination against a particular group of property owners), or that an attempt should now be made to secure voluntary conversion of existing debts into new debts subject to this condition (which would involve an addition to the present burden and, unless creditors of the State under-estimated the future fall of prices, would bring no relief on balance).

There are, however, four essays which are of special interest. In the first three (pp. 1–93) Professor Gini propounds a theory of the causes of war. In the fourth (pp. 155–74) he reprints a memorandum drafted by himself and submitted in the name of the Italian delegation to the C.S.I.R. (Commission Scientifique Interalliée du Ravitaillement) in 1918.

It was the function of this Commission, which consisted of representatives of the chief allied and associated governments, to make recommendations as to the distribution of available food-stuffs between the various countries concerned. It appears that the Commission was instructed to ignore financial considerations. "Ability to pay" was, therefore, not in question, and the problem was simply that of securing a distribution according to needs as between the allied and associated communities. At its third session the Commission decided that 3300 gross calories should be taken to represent the daily food requirements of an average man in the British, French and Italian populations regarded as a single aggregate. They further decided that, for the purpose of distributing food-stuffs according to this formula, an "average man" should mean a male more than fourteen years of age, whether British, French or Italian. So far, then, we have a proposed distribution between the three countries proportionate to the numbers of their male populations over fourteen years of age. At this stage enters Professor Starling, the British representative on the Commission, who argues that such a distribution would give too much to the French and Italians and too little to the British, and that, having regard to "the influence of anthropometric and climatological factors," if 3300 calories represents the daily requirements of an average Englishman, that of a Frenchman should be reduced to 3220 and that of an Italian to 3177. Professor Gini's memorandum is a reply to Professor Starling, designed to confute his argument and to re-establish the case for equality. Professor Starling's

anthropometric argument is that individual food requirements are proportionate to the superficial area of the body, which is greater in the average Englishman than in the average Frenchman or Italian. Professor Gini replies that this difference is small as between men; that with women the difference, if any, is the other way,—" there is a prevailing impression that Englishwomen are thinner than French and Italian women " (p. 158);—that other factors besides superficial area determine food requirements, such as the greater vivacity and intensity of speech and movement among Southern peoples, involving a greater expenditure of nervous energy; and finally, that, in reality, a smaller superficial area signifies, not less need for food in the present, but less consumption of food in the past. Professor Starling's argument from climate is based on the average mean temperature of groups of towns in Great Britain, France and Italy respectively. Great Britain being colder than France or Italy, he argues that Englishmen require more food than Frenchmen or Italians. Professor Gini replies, first, that the greater heat of Italy is exaggerated in Professor Starling's figures, since all the Italian temperatures taken, except one, are practically at sea level, whereas nearly three-quarters of the Italian population live more than fifty metres above the sea; second, that where the artificial and the natural temperatures differ, it is the former which is relevant, and that Englishmen heat their dwellings more effectively and clothe their bodies more warmly than Italians; third, that large numbers ot British soldiers are fighting in warmer climates than those in which they normally live, whereas the great majority of Italian soldiers are fighting in colder climates. Further, among the civilian population, the average working day in Italy is longer than in England, and a larger proportion of the population is engaged in heavy manual labour. And so on, a very pretty argument, which apparently produced more effect on the Commission than on the British and American Governments, which had control of the food-stuffs.

Professor Gini's theory of the causation of war is a " demographic " theory. He holds that all wars are fundamentally due to " the pressure of population." Other causes, which are commonly assigned, quarrels about women in the classical legends of Greece and Rome, religious quarrels in the Middle Ages, dynastic quarrels, quarrels about national independence in the nineteenth century, quarrels about economic interests and imperialist expansion since 1870, are not, he thinks, true causes, but only pretexts and occasions (pp. 64–5). This thesis, as

Professor Gini admits, is not new. It has long formed part of the stock-in-trade of certain journalists and pseudo-scientific writers. "The need to find an outlet for our surplus population" was part of the German patter before 1914 (though only 26,000 Germans emigrated in 1913), as, with slightly greater plausibility, it is part of the Japanese patter to-day. What is new is the clothing of this ancient thesis, at the hands of Professor Gini, with new and attractive-looking garments of rational defence. These garments are skilfully woven and, in the course of his weaving, much that is interesting emerges. He works out, for example, more fully and suggestively than I have seen elsewhere, the analogy between the age and youth of individuals and of races (pp. 10–19), and he indulges in some acute criticisms of Mr. Norman Angell (pp. 55 62). But the new trappings do not make the old thesis much more acceptable than before. It would be idle, of course, to deny that pressure of population has sometimes been a contributory, and occasionally even a dominant, cause of wars and invasions. The barbarian invasions of the Roman Empire are an obvious case in point. But emphasis upon this cause, to the practical exclusion of all others, does not provide a tenable theory. It is only a restatement of this theory to say that the cause of all wars is lack of birth control. It would seem to follow that the League of Nations, in order to prevent future wars, should confine its activities to neo-Malthusian propaganda, the intensity of which should be adjusted to the "pressure of population" in various countries. But Professor Gini does not draw this deduction. "Perpetual peace through readjusted birth-rates" is a programme which somehow looks inadequate. The reason surely is that common-sense is not wrong in treating as true causes of wars those quarrels which Professor Gini dismisses as mere pretexts. Policies leading to war are decided by small groups of influential men, to whom Professor Gini's mere pretexts are often real and genuine motives. Sometimes part of the "populations," alleged to be subject to pressure, approve the policies, though not necessarily apprehending whither they are leading; more often they are ignorant of what is being done in their name, until suddenly confronted with a situation in which young men, having no quarrel with one another, must kill and be killed at old men's bidding. Tribal chiefs coveting their neighbours' wives, religious fanatics howling for a "Holy War," "pretenders" coveting occupied thrones, good men and bad equally aflame with nationalist passion, politicians seeking prestige and business

men seeking profits in the expansion of colonial empires, professional soldiers seeking security for their country and practice and promotion for themselves, armament-makers and sensational journalists plying their trade, and all willing that, for the satisfaction of their own desires, other men should die,—these are part of the real stuff of history, not to be explained away in terms of differential birth-rates. Professor Gini thinks that it was the increase of Italian population which led the Italian Government to make war in Eritrea and Libya (p. 85), places whither very few Italians go except unwillingly and under orders. And was it, I wonder, the decrease of French population which led the French Government more recently to make war in Syria?

Scientific serenity apart, Professor Gini's theory does not help the prevention of war. On the contrary, it has an unwholesome smell of fatalism and covers up the tracks of malefactors. Nor does it carry conviction to the mind, or account for the real facts. In the interests of truth, no less than of peace, it is highly desirable that it should not make headway.

HUGH DALTON

National Welfare and National Decay. By WILLIAM McDOUGALL. (London: Methuen, 1921. Pp. 214.)

THERE is classical precedent for admitting a theory of population to a place in economic literature. The theory which Professor McDougall develops is, indeed, very different from that of the classical economists. It could not be said of him, as of the younger Mill in an epigram by Moore, that he was opposed to "all breeding whatever" (Mill Senior only to good breeding!). Our author's arguments point, rather, to the encouragement of births among the classes that are superior in natural endowments, "intrinsically better." By what tests is this superior nature to be discerned? Professor McDougall adduces evidence of differences in intellectual capacity afforded by the application of "intelligence-tests" to American recruits. A sample based on several thousand observations exhibits contrasts between white and coloured, literate and illiterate. Each of the four groups constituted by combination of these attributes, say WL (White Literate), WI, CL, CI, is distributed according to the percentage which is contributed by each of eight classes labelled in the order of decreasing intelligence A, B, C+, C, C−, D, D−, E. To convey a rough idea of the

results we have lumped together the three highest percentages (A, B, C+), and also the three lowest, for each of the four groups, as follows:

Upper Strata.

WL 20·6	WI 4·9
CL 5·5	CI 1·3

Lower Strata.

WL 28	WI 59
CL 65	CI 86

It will be seen that both the whites and the literates show relatively large percentages of high intelligence and small percentages of low intelligence. The author is satisfied that the superiority of the white literates to the white illiterates is due not wholly or mainly to their schooling, but rather to an inborn greater capacity for intellectual growth. An examination of three schools leads to the conclusion that the upper social strata as compared with the lower contain a larger proportion of persons with superior natural endowments. Difference in character between races is illustrated by the defect of Indians in will-power as contrasted with their British rulers.

Further evidence of natural inequalities is derived from the contrast between the art of the Nordic and that of the Mediterranean race. "The Nordic race is constitutionally introvert; it is strong in the instinct of curiosity, the root of wonder, weak in the herd instinct, the root of sociability. In the Mediterranean race these peculiarities are reversed." The introvert, we may explain, is slow and reserved in the expression of his emotions, given to introspective brooding; not vivid and vivacious, like the extrovert. The curiosity of the Nordic race appears in its art. "It is the addition of *curiosity* to this (the) desire of beauty that constitutes the romantic temper," says Pater. The French character is related to the English as Mediterranean to Nordic. "The sociable and extrovert race is prone to homicide, but not to divorce or suicide." "The curious Nordic, we may suppose, brooding in secret distress and pondering the problem of his partner's infidelity, strives to understand how such an act has become possible; for the impetuous, incurious Mediterranean the fact alone suffices." It appears to us that by catching at evidence of this sort the writer has prejudiced an otherwise strong case.

Supposing the author's thesis established, what practical consequences follow? What shall we do to avert the decline

with which civilisation is threatened by the increase of a low-grade population? There is suggested some readjustment of family incomes. Every family belonging to "the selected classes" should receive for each living child under the age, say, of twenty years an addition of a tenth or so to the income already earned—an arrangement by which the incentive to effort would not be weakened. There is foreshadowed a community, Eugenia, in which the qualities required to promote national welfare and to avert national decay will be selected and transmitted by heredity. "The supply of first-rate calibre can only be maintained by the fruitful mating of persons of superior strains. At present, in all highly civilised societies, such persons tend to be absolutely or relatively infertile. Eugenia is a scheme for bringing persons of such strains together in fertile union which will give to the world an increasing number of persons of similar calibre." The abolition of the family prescribed by Plato will not be adopted in Eugenia. In that happy land domestic life and devotion to intellectual pursuits will not be incompatible.

F. Y. EDGEWORTH

A Social and Industrial History of England before the Industrial Revolution. By M. DORMER HARRIS. (Collins. Pp. 227.)

A Social and Industrial History of England in Modern Times. By E. WELBOURNE, M.A. (Pp. 212.)

BOTH these books are part of a series of economic text-books intended for continuation schools. They are issued under the editorship of Mr. Manning, with Sir William Ashley as consulting Editor, who expresses their aim as follows in the Introduction: "These books are intended for those to whom the call of citizenship does not come in vain, those who want so to live and work as to preserve the gains of civilisation and yet to help the world and their country, as nearest to them, to a better future."

Miss Harris' book, which has interesting illustrations, accentuates the social side of English development and carries its history down to the beginning of the eighteenth century. The headings of some of the chapters will show the stress laid on the social aspect of English development: "The villager in later times," "The woman as worker," "The child as worker and learner" ("He was expected to rise early, work hard either with hand or brain, and show his elders great politeness"), "The pull of the town," "The shop and the fair," "The merchant and the

craftsman," "The artisan from overseas and the native workman." There are also two pages of bibliography as a guide to more advanced reading.

Mr. Welbourne's book is concerned with the nineteenth century, and great attention is paid to the latter half of it, which is a most unusual feature. He stresses the importance of the new transport developments by land and sea, and is obviously not one of those who considers that the industrial revolution was over by 1840. He shows that even more inventions of a revolutionary nature occurred after that date than before it. The originality of his outlook may perhaps be illustrated by two quotations.

"It must not be forgotten that within the last few years a work as great as that of the men who developed the modern breed of cattle from the plough ox has been quietly done by the gardeners. They have added to the number of months in which it is possible to eat fresh vegetables by the inventions of late and early varieties. They do not shrink from inventing new vegetables and fruits to be eaten at a time of year when Nature has provided nothing."

When one reflects that this, combined with the import of fresh fruits, meant an abatement of scurvy, one of the most frequent causes of illness and death, especially of children, in every century except the nineteenth, one realises the importance of these vegetable "inventions." They needed, however, rapid and cheap transport to make them available for all classes.

Again—"In 1891 the first steam trawler sailed to Iceland, and since then the seas just within the Arctic Circle have been the true source of our fish supply. . . . In 1900 the Grimsby artificial ice-factory started to work and the annual catch of fish leaped at once from 92,000 tons to over 134,000, an amount which has since been far exceeded. Aberdeen has a similar record of activity. . . . It is the steam trawler catching such fish as are found all the year round which has given us the present steady supply of good, cheap fish." He then talks of the development of the fried-fish shop as an "invention of the twentieth century." "Yet until 1890 the inland town dweller knew fish only as a luxury, except perhaps in its cured form."

There are other chapters dealing with trade unions and Factory Acts, the views of the economists, money, banking and trade. It is unusual to meet with a discussion of other social classes than the agricultural labourer and the artisan, but Mr.

Welbourne devotes a chapter to postmen, policemen, teachers, clerks and shop assistants, and another to "Modern Society."

Both text-books show considerable evidence of research on the part of their writers. They are valuable from the point of view of scholarly presentment and originality of handling, and both are vivid, real and interesting. Both may be highly recommended to teachers of students from fourteen to eighteen. Nor would they be unprofitable reading for older persons.

L. C. A. KNOWLES

Modern Economic History, with Special Reference to Australia (Workers' Educational Association Series, No. 5). Published by the Workers' Educational Association of South Australia, 1921 (obtainable from Messrs. Macmillan in England). Pp. 288.

THIS book deals mainly with the period after 1760, and its novelty lies in the fact that it is constantly instituting international comparisons. It is also the only text-book known to me in which one can get the economic history of a self-governing colony treated as part of the general movement of the economic development of the world. The book would, however, be more properly styled the history of the main phases of the labour movement up to 1921, for sixteen out of the twenty-six chapters deal with industrial legislation, socialism, trade unions, syndicalism, co-operation, profit-sharing and similar industrial problems. It is, as one would expect from the author of the *History of the Yorkshire Woollen and Worsted Industry*, a scholarly book, and shows evidence of wide international knowledge. Each chapter contains a list of books for further reference. One of its merits lies in the fact that five of its chapters deal with Australian agriculture, tariff history, trade unionism before and after 1890, and the state regulation of industry and wages in Australia, while in other chapters Australian trusts and experiments in public ownership are discussed. As the University of London has just made "The Economic Development of the Empire in the Nineteenth Century" a compulsory subject for the Final Examination for the degree of Bachelor of Commerce, and as the modern Economic development of the Empire has not been written, this book will be of considerable assistance to the student for one part of the subject. Mr. Coghlan's great work on Australia, in four volumes, does

not, unfortunately, go beyond 1900, whereas Mr. Heaton takes his subject up to and beyond the war.

The book can also be recommended to students who require a useful historical account of the labour and socialist movements in various countries up to 1921. The book was planned for the Australian Workers' Educational Association, and that perhaps accounts for the fact that working-class movements and socialist opinion are unduly stressed in a book entitled "Economic History." After all a history should chronicle actual accomplishment, and the accomplishments of the labour movement as compared, say, with the capitalist creation of railways, steamships, cables and electricity, have been small. Yet one would look in the index in vain for either "railway" or "steamship," a curious omission in the history of a country practically focused upon England from the very beginning for its markets and its capital. To such a country sea communi cations are its life-blood, whatever the views of its labour party. Mr. Heaton says in his Preface that he does not deal with public finance. But it cannot be left out of account in a country like Australia, which owes so much of her rapid economic development to England's loans, and in which the indebtedness per head reached the enormous sum of £131 3s. 10d. in 1917–18 (*Commonwealth Year Book*, 1919, p. 798).

L. KNOWLES

The Industrial State. By M. D. STOCKS, B.Sc. (London: Collins Clear Type Press. 1921. Pp. 319. Price 4s.)

MRS. STOCKS has surmounted the difficulties of the text-book writer with remarkable success. She has produced an introduction to English economic history which is clear, admirably proportioned, vivid and accurate. We begin with a glance at the Middle Ages. Though the Church forbad usury, and the Government thundered against engrossers, fore-stallers and regrators, we must not suppose that mediæval life was all jam. Robbery and assault, fire, pestilence and famine make human life both insecure and uncomfortable. To understand the Middle Ages we must understand "the structure of their economic life." This Mrs. Stocks should certainly help her readers to do by her altogether admirable twenty-page sketch of the manor and the gild, a miniature portrait of quite exceptional skill. Two chapters on the "Close of the Middle Ages" and the "Birth of a Sea Power" carry us over the rise of the money economy, the Black Death and the legislation which followed and ignored

it, introduce us to the domestic system in the cloth industry, and show the relations of our island to a rapidly expanding world with a new scale of international values. Thus we are landed in the first "Age of Paternalism," concerning which the author sagely remarks, "It is possible that some of our fatherly Tudor legislation was just a little grandmotherly."

As she approaches the modern age, Mrs. Stocks handles her subject well. Without belittling the importance of the Industrial Revolution she avoids giving the too common impression that history broke off sharply about 1762, to start again on quite new lines thereafter. She is cheerful, more cheerful than some of us would be, about the future of the Great Society, and dismisses Malthus with an assurance that "his soul may rest in peace, for in spite of his grim apprehensions our food supply has more than kept pace." In the chapter entitled "The Great Society comes of Age" the "problem of Labour and Capital" is somewhat boldly disposed of in a single paragraph.

There are naturally some omissions in this little book. For instance, we are surprised to find no mention of the invention of printing, nor any of the penny post. But these do not seriously impair the great merits of the book, which should be read by many more than the Continuation School pupils for whom it is primarily intended. An old story so remarkably well told is as well calculated to refresh the interest of the "professional" as to stimulate inquiry in the learner.

BARBARA WOOTTON

Government and Industry. By C. DELISLE BURNS. (London: George Allen & Unwin, Ltd. Pp. 315. Price in Great Britain, 16*s*. net.)

MR. BURNS attempts, in his publishers' words, to describe "the existing relations between the British Government and the industrial system and the tendencies that indicate (in the author's opinion) the formation of an organised economic community."

The author appears to take a middle position in the controversy between "freedom" and "interference." He rejects much of the reasoning of the *laissez-faire* school, and holds that, far from there being a necessary antagonism between the government and industry, "what makes the British experience specially important is that the movement between government and industry

is mutual; for each is approaching the other, almost without losing its own vitality." He appears also to hold, as do many of those who do not occupy an extreme position in either direction, that the function of the State in industry is normally rather to guide and supervise, than itself to undertake direct management. "Social organisation is actually based on the pursuit of a common good shared by individuals: and, in the economic sphere, this organisation is co-ordinated by the economic functions of Government."

He is careful to distinguish the purely governmental from the industrial functions of the State; and aims at excluding the former, except so far as their consideration is necessary to develop his main thesis. The dividing line, indeed, is sometimes difficult to draw. Mr. Burns, for example, treats education and public health as belonging purely to the governmental functions of the State, and concerned only indirectly with its industrial duties. But his insistence on the general distinction helps to fix clearly in the reader's mind the limits of the State's industrial sphere.

Throughout the book the general idea is well worked out. The author shows carefully not only the cause and means of the State's entry into industrial activities, but the corresponding approach of industry to government from the other side. In particular he draws attention to the quasi-governmental functions undertaken by industrial bodies, such as Joint Industrial Councils.

There is an excellent opening chapter upon the "Distinction between Government and Industry," followed by two others, which deal with Administration as it affects industry, and with non-governmental industrial organisation. Subsequently, a separate chapter is devoted to show how each of the chief branches and problems of industrial life are affected by Government action: as, for instance, hours and conditions; wages; unemployment; and foreign trade. There are also chapters on "The Government and War Controls," and on "Communal Enterprise." The final chapter, on the "State and Economic Life," treats first of the change in the machinery of government, which has arisen from the more extended entry of the State into economic life, and, secondly, of the alteration of the dominant social motive. In regard to the latter, the author sees the beginnings of a "reorganisation of economic life on a basis of common good, as contrasted with contending individual interests."

It will be seen, therefore, that the book covers a wide field;

and it is well worked out in outline. Really detailed treatment is not given, for the space available does not allow the author to cover so wide an area very fully. But his work provides an interesting introduction to the subject, and a starting point for the students who desire to take it up in more detail. The general treatment is sensible and accurate, though the details are not always above criticism. In certain instances, also, the comments of the author seem one-sided, as, for instance, in dealing with the safeguards against the abuse of relief work (p. 134); and in the strictures upon the mediæval Statutes of Labourers, the fact seems to be overlooked that these in many respects were honestly based on the prevailing moral ideals of their age. Nevertheless, Mr. Burns has done a piece of work which, without rising to great heights, is certainly useful, and may well prove a valuable introduction to further inquiries.

N. B. DEARLE

The Nature and First Principle of Taxation. By ROBERT JONES, B.Sc. (Econ.), with a Preface by SIDNEY WEBB. (London: P. S. King. 1914. 8vo. Pp. xvii + 299. Price 8*s*. 6*d*. net.)

Taxation: Yesterday and To-morrow. By ROBERT JONES, D.Sc. (Econ.). (London: P. S. King. 1921. Small 8vo. Pp. 147. Price 3*s*. 6*d*. net.)

THE first of these two volumes appeared just before the War. It is a thesis for a doctorate, and is a restrained and industrious essay compounded *secundum artem* with " a list of more than a hundred quotations, set out chronologically, of the views of the economists, politicians, and philosophers on the principles of taxation." As to the Nature of Taxation, we are told that it is a compulsory payment to the State, irrespective of any definite or measured services rendered or to be rendered. Its First Principle is Economy. The man of affairs may be excused a little irony if he observes that he has all along suspected taxation of being compulsory and divorced from any definite service—nay, even in some cases associated with definite disservice—and asks what is the outcome of the First Principle and how it marches in practice.

Taxation: Yesterday and To-morrow descends into the arena of politics. The author quits the academical aloofness of his first essay to write a popular manifesto on public finance. His

scholarship is less in evidence. He describes the *Wealth of Nations* as "a Free-trade tract." Others have said so before him, but seldom when they have read it or have any credentials as judges of economic literature. The attribution to Eugène Daire of Quesnay's well-known maxim, "*pauvres paysans, pauvre royaume: pauvre royaume, pauvre roi,*" is rather surprising. A table of successive increases in Death Duties shows a high-water mark of 28 per cent. in 1920. As Dr. Jones proposes drastic changes in the Estate Duty, he should have been careful enough to set out the fact that the present maximum rate was fixed at 40 per cent. in 1919.

Detailed criticism is hardly necessary when we come to the scheme of reform—the taxation of to-morrow. We are advised to budget for ten years ahead, to raise a revenue of 2000 millions each year, to levy the new taxes upon unproductive surpluses and the upper portions of large incomes by direct taxation, and to increase the Estate Duty to such a pitch that in no case is more than £10,000 to be left as inheritance. When the House of Commons is prepared to commit suicide it may be disposed to accept a ten-year Budget, and when the authorities are able to budget for twelve months ahead without seeing all their estimates upset it will be time enough to think of a ten-year forecast. No great foresight is needed to envisage the situation when we shall pay every year in taxes and rates (rates seem to be forgotten in the scheme) more than the whole annual income of every man, woman and child in Great Britain—Ireland now excluded. It is to be presumed that Government will feed, house and clothe us in the first year; but, as the Russian doctrinaires have found, when the State seizes private wealth the sources of taxation run dry. One year out of the ten is enough to produce chaos and unbearable distress. We are confidently told that there is no scientific case against the abolition of inheritance over £10,000. We have not so learned science.

The long and short of it all is, that though indignation may make verses—and possibly good verses—it makes bad finance. Anger is a bad counsellor, and vindictive taxation has never yet been justified by results. There is the question whether you do well to be angry, the difficulty of finding an effective method of carrying out your intentions, and the probability that even if these obstacles are surmounted, you will pay too much for your whistle and be forced to desist from an impracticable policy. The Park orator may assert that if there were no very rich there would be no very poor, and that to abolish poverty you must

cut off the heads of the tall poppies. A D.Sc. (Econ.) ought to know better. The child complains when it is always jam yesterday and jam to-morrow, but never jam to-day. We may take comfort that *Taxation: Yesterday and To-morrow* will never be taxation to-day.

HENRY HIGGS

Inflation et Déflation. Par YVES-GUYOT et ARTHUR RAFFALOVICH. (Paris: Félix Alcan. 1921. Pp. viii + 278. Small 8vo.)

THE dominant purport of this vivid sketch is, we gather, not so much to delineate and present aright what is new, though that aim is included, as to recall and impress what is old. The authors repeat, in fact, a tale told frequently before, which has unfortunately as often been forgotten, and once more, in recent years, with a like result. There are indeed some fresh incidents, but most is, unhappily, familiar; and similar causes have again had no dissimilar effects.

In a short first section certain "elementary" notions about money are deftly emphasised for the benefit of the lay public at a juncture when those more authoritatively placed and expertly trained, who "should" have opposed "inflation," have yielded to the subtle infection of "error" on the character of bank-notes and the nature of exchange. The next hundred pages are filled with a comprehensive picture showing the dry searching light shed by calamitous experience, monotonously reiterated in well-nigh the self-same sombre guise, or disguise, on each occasion, of "inflationism" in the past. Yet the stern lesson, grimly taught, was overlooked, or unheeded, or thrust aside, by belligerent nations in the testing period of the recent war, and, even more recklessly, or fatalistically, by some in that succeeding the armistice; and in their third section our authors pass no unmerited censure on the behaviour in these eventful and distressful times of France, Germany, England, the United States and Russia. The scale of their misdoing may have differed; and more than one of possible instruments was utilised in varying measure by the countries concerned, including, we may add, neutral nations. But, without exception, they have earned the general condemnation here pronounced. They have been responsible for "inflation."

They might indeed plead the plausible, if not sufficient, excuse of hard necessity, or they might set up the more specious

defence that, as they conformed to what was in effect a world-movement, they could not, by standing out, have stopped the origination, or avoided the results, of imprudent act. But in most, if not all, cases they cannot claim a verdict of "not guilty" or "not proven" on the special charge brought here by MM. Guyot and Raffalovich of infelicitous recourse to a "forced loan" by the issue of "inconvertible paper." On this count, though not on "inflation," the United States alone of the five countries mentioned previously seem entitled to acquittal with, it may be, a "caution." Our own Government, whose sin was less unblushing in intention than that of other countries, and whose *modus operandi* has been more circuitous, must nevertheless be adjudged to have got part of the enlarged credit, which it forthwith employed, by this dubious means; and the Prime Minister, we hold, was skating across ice of extreme tenuity when he boasted lately that we had not transgressed on that treacherous quicksand of "inflation of the currency" in which Continental nations were floundering, and sinking deeper out of reach of firm ground. Lord Cunliffe's Committee has mapped England's slow route to a goal to which, as this book demonstrates, Russia under Lenin, attaining "le dernier degré de l'inflation dans la monde," passed with lightning speed.

A brief fourth section discusses "déflation," the direction in which we may now be supposed to have set our face with dour resolve and may boast that we have led rather than followed in the track of European currency-handlers, although it must be remembered that the antidote cannot wisely or securely be administered to the sick patient with the short-sighted haste and deadly ease of the original poison. The cure, which is painful, should be gradual. In a final section our authors deal faithfully with inflationist "sophisms," where the inclusion of tainted opinion spread by protectionists may be connected with a pet aversion which they would not, we imagine, be careful to disown.

The appearance of this spirited lucid essay is, as we have hinted, not inopportune. It was well worth the while of MM. Guyot and Raffalovich to bestow pains on pressing home the moral drawn from past history and confirmed by late experience. Of all "forced loans" inconvertible paper money is the "worst," and the manufacture of credit done during the war amounted, by its mischievous influence on prices, to indirect taxation of the people. It is true that there is room for fair argument whether, in British experience, for example, the supply of additional

currency was not a necessary sequence of the credit operation that must be held primarily responsible for the ills and suffering of "inflation." That facile mode of furnishing "ways and means" to driven Ministers, faced by the formidable task, admitting neither of delay nor respite, set by the huge cost of modern warfare on the grand scale, is a new feature distinguishing the recent struggle from its predecessors; and the "rotatory" (or, in the expressive French, the "giratoire") movement, which is the device of contemporary banking, seemed, during the war, to offer almost limitless possibility of raising the big funds required without unconcealed taxation, or straightforward borrowing of savings, got from the contributing or subscribing public. The aftermath accompanying the armistice and peace has rendered disagreeably obvious the inwardness of such finance. Its final impassable boundaries and its postponed but inevitable consequences have been too plainly demonstrated to be neglected or misunderstood. But nevertheless our authors, while, apparently, they indorse Dr. Cannan's characteristically positive exhortation to burn the paper pounds and ten-shillings that we owe to the "profiteering" of the Treasury, are sensible that "inflation" is a term which demands the long, full definition or description they themselves supply, embracing an extraordinary multiplication of banking deposits, against which cheques are drawn. Their attitude here is rightly broader, while in their general treatment they may be inclined to emphasise too narrow what is a prominent symptom rather than sole proof of the underlying malady. The issue of inconvertible paper is fastened upon by them as by others; and we are not sorry, for it is the common and plain incident of conduct, of which continuing recognition of the need for a gold "backing" serves as wholesome restraint.

Of the vice of "inflation" MM. Guyot and Raffalovich entertain no doubt. With French neatness and point the distorting, mystifying atmosphere thereby spread is pithily described by them as a situation in which we witness "Gladstone battu par John Law."

L. L. PRICE

Finanzwissenschaft. VON DR. BÉLA FÖLDES. (Jena, Verlag von Gustav Fisher. 1920. Pp. 686.)

DR. BÉLA FÖLDES, in this work, covers as adequately as a text-book permits the whole ground of Public Finance. His treatment of the subject, which is both historical and analytical,

is so impartial and cautious that the book evokes little criticism. It investigates in a thorough manner British financial legislation and policy down to almost the termination of the World War.

Throughout the book he emphasizes the political side of taxation, both from the national and international points of view, and gives many instructive instances of the mutual influence of politics and finance, *e. g.* the favourable effect on the Franco-Russian friendship, in 1887, produced by Bismarck's policy of the sale of Russian securities which had been issued in connection with the loan that had been taken up by the "Preussische Seehandlung" in 1884 (pp. 594–595).

He points out in the introduction (p. vii) that the war has brought into prominence the social aspect of private property, and the extent to which it is dependent on society for its development, and on good government for its maintenance. "The State and the individual must accordingly be regarded as two different aspects of the same phenomenon. They both form one whole. Only by this fact being brought to the consciousness of every one will the fear be suppressed that supporters of just and rational taxation will be pushed aside through the pressure of necessity." He believes that nations will be in a position to pay interest on the colossal war debts provided they submit to great privations and make great efforts.

In Chap. I. Bk. II. he discusses at length the problems of the Budget, and after duly weighing the arguments for and against Net and Gross Budgets respectively, he decides in favour of the Gross Budget. In Chap. IV. he throws a comparatively new light on the right of Parliament to reject the Budget. This has a particular interest nowadays in view of the growing pretensions of Cabinets to regard Parliament only as a registering body.

With reference to the Comptroller and Auditor-General in England he states (p. 82): "He has the right of preventive control, though this right is much impaired by the fact that (1) he is an organ of the Government while he ought to be an organ of Parliament, (2) that his staff is appointed by the Treasury."

He discusses fully the problems of State expenditure: a department of the subject of Public Finance which he thinks has been neglected by most writers. With regard to the growing burden of State pensions in some countries, he asserts that this increase is largely caused by many officials retiring on pensions in the full possession of their health and business efficiency.

Though he gives many valuable statistics of, and much information on, loans, taxes, etc., yet he attempts no thorough analysis of their underlying principles, nor of the issues which a Finance Minister ought to have before his mind when considering the proportion he ought to maintain between loans and taxes.

In the two chapters in Bk. IV. he discusses with impartiality and very comprehensively the arguments for and against progressive taxation. He considers that the principle of ability to pay is sufficient justification for progressive taxation. His remarks on the relation between progressive taxation and the distribution of incomes are suggestive of very important issues. He asserts that "progressive taxation has only important significance when great disparities show themselves in the material conditions of the citizens."

His discussion of a levy on capital to wipe out a portion of the war debt is brief and somewhat one-sided, as he does not set forth the many arguments that have been alleged in its favour. He seems to assign too much importance to the argument that it will be a precedent for many future levies and that this fear will decrease the incentive to save. Though he sets forth Ricardo's arguments in favour of a levy, yet he quotes mostly the authorities that are hostile to it; and, further, with regard to Ricardo, he states that Ricardo himself doubted whether such a levy could ever become practical politics, as the virtue and wisdom requisite for the realization of this policy are scarcely to be found.

In Chap. V. Bk. V., which deals with war taxes, he refers to the 50 per cent. income tax for the highest incomes, and the 80 per cent. tax on Excess Profits as being extraordinary, and justified only by the colossal costs of the war. In fact, he says (p. 531): "It is really questionable if we can speak here of taxes; but rather with much more truth have we to do with confiscation."

In discussing Adam Smith's Canons of taxation, he shows that general principles of taxation were established much earlier; that Adam Smith's Canons cannot be spoken of as a scientific discovery; and that only the first Canon can be regarded as a general principle: the other three are only useful maxims.

The book throughout is most readable, and is written in a simple and interesting style. It well merits a careful perusal by students of Public Finance and Administration.

T. A. Smiddy

The Economics of Tenancy Law and Estate Management. By H. STANLEY JEVONS, M.A., B.Sc. (Allahabad. 1921. Pp. 114.) Price R1/8.

THIS bulletin of the Allahabad University reproduces the substance of a course of lectures on the Indian land problem. It is interesting to get the views of a distinguished English economist on that intricate question, and Mr. Stanley Jevons is entitled to a respectful hearing, because his occupation of the Chair of Economics at Allahabad for seven years has given him the opportunity of studying it on the spot. Naturally he has concerned himself chiefly with the law of landlord and tenant in the United Provinces of Agra and Oudh.

He realises that ownership in the English sense does not exist in India, because there the State has always asserted its title as overlord, and claimed as such a share of the produce. He has seen that in many parts of India ownership is further limited by the existence of a privileged tenancy, and this he regards as an unfortunate feature of the land tenure.

The first settlement officers were confronted with warring claims and very difficult questions when they drew up their Doomsday books.

In Bengal under the permanent settlement of 1786 large estates were recognised as the normal type of landed property. The Government's declaration that measures would be taken to protect the tenants remained a dead letter for three-quarters of a century, and was only imperfectly carried out when the Rent Act of 1859 was at last passed. In Oudh the first settlement of the question was cancelled after the Mutiny, and large estates more or less on the Bengal model, with the talukdars as their owners, were recognised as the prevailing form of tenure. But here subordinate rights were not neglected. Such peasants as had originally been recorded as proprietors were given fixity of tenure at favourable rates of rent, their tenure being heritable, but not transferable. By a further compromise tenants in possession in 1886 were converted into leaseholders for seven years. Any increase of rent at the end of the term was limited to 6¼ per cent. whether the old tenant remained in possession or a new leaseholder was put in. This provision was often defeated by the exaction of a large premium. In the Panjab the actual cultivators with holdings ranging as a rule from five to fifteen acres were usually recorded as proprietors. Large estates are not common and protected tenants form a comparatively

H 2

small class. In respect of its tenures Agra lies midway between Oudh and the Panjab. As compared with the latter it has many more landlords in possession of estates cultivated mainly by tenants, of whom many have fixity of tenure or "occupancy rights," which are acquired by twelve years' continuous occupation. Thus as regards a large part of his land the owner's hands are often tied, but most proprietors have more or less which they can cultivate direct or let to tenants at will. In some parts of Agra peasant owners of the Panjab type preponderate. The extreme cases are unburdened peasant ownership and large estates in which none of the land is tilled by protected tenants. Conditions in Southern India are much nearer to the Panjab than to the Oudh type.

The question which of the two is more advantageous has a political as well as an economic side, but the author is only concerned with the latter. He has no doubt that small holdings, by which he means those below fifty acres, whether in the hands of peasant owners or privileged tenants, are uneconomical in India. He warns us not to be misled by the "apparent success" of this form of tenure in Europe, for Western countries import a considerable part of their cereal food. Wheat-growing is not suited to small farms, a statement hardly applicable to India, where the Panjab, the home of the peasant owner, is a great wheat-growing, wheat-eating, and wheat-exporting tract. But in Europe the small holders can devote their attention to market gardening. Moreover, they are sufficiently intelligent really to benefit by co-operation. India, on the other hand, will always have to grow its own food, while at present its crop yield is less than half that of which the land is capable. Whether as an abstract proposition this is true or not, the fact remains that the peasant of Northern India is very often a good practical farmer, and that a great deal of the land is well cultivated. Nor will the statement that he is too backward and ignorant to make much use of co-operation be accepted without demur. Co-operation has, in fact, made a promising start, though it would be folly for its advocates to claim that, in attacking by its means a huge problem, they have so far done more than reach the outworks. Mr. Stanley Jevons points out that the rural population is very dense, and the standard of living very low, and, so far as large parts of the United Provinces are concerned, both statements are true. Any improvement in the standard of living will, he holds, be rapidly nullified by a further increase of mouths. In all discussions about pressure on the soil and *morcellement* in

India there is a tendency to exaggerate the increase of population, which is much slower than in England. That of the United Provinces is no greater to-day than it was thirty years ago, notwithstanding the increase of resources. But it is quite true that the rural population is redundant. The author's conclusion is that it is useless to expect that small holders can be effective agents in improving cultivation by sinking wells and adopting new implements, or better types of crops and cattle.

He is confident that "the agricultural organisation most appropriate to the stage of social development in India is the landlord and tenant system with fairly large estates, and a *certain number of large farms worked by gentlemen farmers*." The landlord is to exercise "his proper function as guide, philosopher, friend, and master of his tenant." A rural economy more or less on English lines is advocated. The big landlord must be taught to sink capital in improving his land and to raise the standard of cultivation by introducing better strains of cattle, better seeds, and better implements. To assist him to fulfil these functions it should be made possible for him to buy out subordinate rights, to enforce exchanges, and to charge rents approaching the economic standard. He cannot replace bad tenants by good ones if his powers of ejectment are unduly restricted. Mr. Stanley Jevons is of course anxious that the tenant should be secured against abuse of these powers, and makes proposals with that end in view.

Confessedly "only a few landlords realise the position they should occupy in the agricultural economy." But it is the business of Government to train them for their high task, and in the case of those who refuse to respond, to take over their estates for direct management. In really bad cases the State is even to have power to sell the property. In all cases it must after a time insist on landowners only employing as their agents persons possessing a diploma of estate management to be obtained by two years' training at an Agricultural College. It may be remarked in passing that this last provision would be evaded with the greatest ease.

Obviously Mr. Stanley Jevons has been much influenced by his knowledge of the great part landlords in the past played in the improvement of English farming. But a landlord and tenant farmer system under which, in the half-century between 1872 and 1913, the arable land in England declined by 25, and the wheat area by 50 per cent. can hardly claim to have been wholly successful. Before the War nearly half of the agricultural land

in Germany was occupied by holdings of less than fifty acres as compared with less than one-sixth in England. No one who studies Mr. T. H. Middleton's official report on the Recent Development of German Agriculture is likely to find himself in agreement with Mr. Stanley Jevons' view of the limited possibilities of peasant farming encouraged, as in Germany, by enlightened State action in promoting co-operation and agricultural education. Starting in 1885 far behind England, Germany in twenty-five years more than made up all the leeway, and in about a quarter of a century took the first place as regards the acreage yield of barley and oats, and brought its out-turn of wheat quite up to the English level. Yet on the whole Germany has a poorer soil and climate than England. In comparing German and Indian conditions it must, however, be remembered that the German peasant holding is on the average much the larger of the two.

It may be admitted that, if we could ensure an unfailing succession of landlords of the type desiderated by the author, his view would be justified. State machinery is incapable of enforcing good management by the means suggested, unless careless and selfish landlords are rare exceptions. It is extremely unlikely that large Indian landowners will ever play the leading rôle set for them. Mr. Stanley Jevons admits that the money-lender who buys out the tenant farmer, and the professional man who invests his savings in land, is a bad landlord. But it is also true that the landlords of an older and better type have been content to be rent receivers. This does not mean that they have always treated their tenants harshly. On the contrary, many of them have shown moderation and kindly feeling. But generally speaking they have displayed no inclination to devote attention to the improvement of their estates, and this is not denied by the author. The Bengal landowners were put in the position he thinks most favourable for agricultural progress, and for very many years were free from all checks. But the latest authority, Mr. F. D. Ascoli, declares that "there is nothing in the contemporary accounts nor in the subsequent history of management to show that the extension of cultivation was in any way due to the efforts of the proprietors." No man had a profounder knowledge of the question in Agra and Oudh than Sir Duncan Colvin Baillie. He stated emphatically that, while there are improving landholders, "the great bulk of the improvements in the Agra province has been carried out by occupancy tenants." His advice as to Oudh was the opposite

of that given in these lectures. All Panjab experience shows that there too it is the little farmer who makes the ordinary improvements such as well-sinking. In the small district of Jalandhar the peasant owners constructed nearly 7,000 wells in the quarter of a century or less that elapsed between the second and third settlements. Neither there nor elsewhere are they unready to adopt such improved implements as are within their means. The general use of a new type of sugar-mill is a case in point. They are hampered by want of capital and the smallness and scattered nature of their holdings. The development of co-operation is doing something to meet the former difficulty. For the latter it is hard to find a remedy, but the matter is too serious to be put aside. Indebtedness is the canker of small tenures. Co-operative credit and drastic legislative restrictions on sale and mortgage, such as have been so beneficial in the Panjab, are the only remedies. The wisest policy for the Indian Government is to follow the path trod by the rulers of Germany in promoting co-operation and agricultural education. Expenditure on the latter and on agricultural research should have for its chief aim the meeting of the needs of small farmers. Landlords and their agents should certainly be encouraged to attend agricultural colleges. Such of them as acquire the requisite knowledge have sufficient lands free of rights to play their part in the advance of Indian farming, imitating the intelligent and well-educated large proprietors of Germany, who have often been the pioneers of agricultural improvement. The best chance of relieving pressure on the soil lies in the development of village and factory industries, care being taken as regards the latter to secure such housing and other conditions as will prevent the further growth of slum populations in Indian towns.

J. M. DOUIE

Land and Labour in a Deccan Village (Study No. 2). By HAROLD H. MANN, D.Sc. (Oxford University Press. Pp. 182.)

DR. MANN'S account of the rural economy of the Deccan village of Pimpla Saudagar was reviewed in the ECONOMIC JOURNAL of December 1918. It was too near Poona to be a truly typical estate, and Dr. Mann has supplemented his first study by one of another village lying twenty-five miles east of that town. Though some of its people find work in Bombay for a considerable part of the year, the village is remarkably

self-contained. The chief crops grown, the two millets and pulses, are consumed locally. The area put under wheat, the only grain sold, is usually quite small. No cotton is raised. The soil is generally shallow and poor, the rainfall is very capricious, and the variations from year to year in the area sown and the yield per acre are large.

Much of what was said in the former review applies also to this study. Where Dr. Mann and his assistants are dealing with facts capable of exact statement their work is admirable. When they proceed to estimates of out-turn and income, and draw inferences from these as to the economic condition of the people, they are on slippery ground. Their conclusions are so remarkable that it will be well to state them before discussing the reliability of the estimates on which they are based. A balance sheet gives the income of the 147 families as Rs. 24,963, of which Rs. 15,802 is derived from land, and the expenditure as Rs. 38,976. In other words, in a normal year the village can only earn 64 per cent. of the cost of living. "Necessary family expenditure," in the estimate of which there is nothing extravagant, accounts for Rs. 32,221 out of Rs. 38,976. Of the necessary expenditure, over 70 per cent. consists of the cost of food. The table on p. 133 indicates that 85 per cent. of the families are insolvent, their incomes being only equal to 51½ per cent. of the sum required for decent subsistence on the most modest scale. Such conclusions are bound to excite doubt. Were they true the people would be half starved and in rags, and, if the village was not actually deserted, its inhabitants would be spiritless fatalists. But we are not told that there are any outward signs of grinding poverty, and the investigators were "astonished at the energy shown by the people in maintaining and improving the land," as illustrated by the wholesale introduction of improved iron ploughs, the sinking of new wells, the planting of orange gardens, etc. The clothing of the people is better than in Pimpla Saudagar, whose economic condition was somewhat less desperate. Ordinary village land should be valueless, but it changes hands freely at Rs. 30 an acre. Yet, if we accept the calculations, a landowner employing hired labour loses in a normal year 9 annas an acre on the two crops which cover 90 per cent. of the area.

Dr. Mann estimates the income from land by attempting to determine the average profit which a cultivator who tills his holding entirely by his own labour and that of his family earns per acre. The figures he adopts are given in a table on

page 94, and by these he multiplies his assumed normal crop area of 2,192 acres. It is doubtful whether the process is a correct one in the case of a village which consumes nearly the whole of its own produce. But, assuming it to be so, the accuracy of the result depends on the capacity of the observer to determine rightly four factors: the cost of cultivation per acre in the case of a man tilling his own land, the normal out-turn per acre, the normal prices, and the normal area. In the case of the two crops occupying nine-tenths of the area, Dr. Mann puts the labour cost (men and bullocks) to the self-cultivating landowner at Rs. 5¾ per acre, but we are not told exactly how he arrived at that figure. As regards the other three factors, he takes the results of 1917-18, which he considers to have been a normal year. So far as crop area is concerned the assumption is more than justified, but the native officer in charge of the tract does not appear to have considered the yield as equal to that of an average harvest (pp. 63–64). The rates of out-turn assumed for the two chief crops, bajri mixed with pulses, and jowar mixed with safflower, are respectively 180 and 150 lbs. per acre. These were determined partly as the result of experiments conducted by an unsafe method of threshing and weighing sample bundles, and partly by a comparison of the results with the figure given by the people for an average crop. The only safe way of conducting crop experiments is to select to the best of one's ability average fields, and thresh and weigh the whole of the produce. No experienced revenue officer in India would accept Dr. Mann's estimates of yield as normal without a great deal of proof. The official estimates for the Poona district as a whole are 340 lbs. for bajri and 500 lbs. for jowar. In the Panjab, where, owing to the prevalence of grain rents, special attention has been paid to produce experiments, the lowest estimates for any district for bajri and jowar are 330 and 420 lbs. respectively. Dr. Mann's own estimates for the out-turn of the two crops in Pimpla Saudagar in 1915-16 were, bajri and pulse 484 lbs. and jowar 400. Pimpla Saudagar has a better soil than the village now reported on, and 1915–16 was a better year than 1917–18. But unless the latter was an abnormally bad year the discrepancies are unaccountable. On the other hand, the prices adopted for these two crops seem unduly favourable. In Pimpla Saudagar Dr. Mann valued bajri at 14 seers (28 lbs.) and jowar at 12 seers (24 lbs.) the rupee. In this remote village, where prices should normally be low, they are valued at 18 and 20 lbs. respectively. The official returns

of wholesale prices for the Poona district are much above those of any other Bombay district, probably because they represent those prevailing in the market of the district headquarters, which is a cantonment and a popular summer resort. But even these figures are much lower than Dr. Mann's. There is reason, therefore, to regard the estimates with suspicion, quite apart from the difficulty in reconciling the inferences drawn from them with the actual state of the people. Nevertheless the study is a valuable contribution to our knowledge of the economic conditions prevailing in the Deccan districts, which have often been a source of anxiety to the Indian Government.

J. M. DOUIE

Rural Reconstruction. By HENRY W. WOLFF. (London : Selwyn & Blount, Ltd. 1921. Pp. 363.)

IN dealing with a work of this kind, written by an authority of acknowledged pre-eminence, the task of the reviewer is to write an appreciation rather than attempt a criticism. This task is all the easier inasmuch as the present writer finds himself in complete agreement with all the more fundamental positions assumed by the author. Before proceeding to indicate and underline some of these positions, it might be permissible to remark that in some respects the book is not "felix opportunitate" of its appearance. It was evidently written at a time when "Reconstruction" was in the air, and hope ran high in the hearts of enthusiasts for agricultural regeneration that rural reconstruction would be proceeded with, and proceeded with along right lines. The author of this book finds himself in the position of an acknowledged specialist whose careful diagnoses and elaborate recommendations for the treatment of his patient have been ignored, while the patient dies from neglect, or is the victim of the ill-considered remedies of quacks. But "littera scripta manet." In the saner politics of the (let us hope) near future this book will become the *vade-mecum* of rural reformers in England, and we trust that Mr. Wolff will live to belie the statement that "a prophet is not without honour save in his own country."

There are many lions in the path of rural reconstruction in England. The land system, admittedly out of date, leads to bad farming and is only less injurious than a system of land nationalisation involving the bureaucratic control of agricultural pro-

duction would be. Agricultural education, or rather the education of agriculturists of all ages and both sexes, requires a thorough overhauling, and above all a "rural atmosphere" must be provided in the country schools. Too long has the rural child been "magnetised with the urban magnet." The Whitehall elephant has useful and important work to do, but the English Agricultural Organisation Society must be allowed to hatch out its own co-operative chickens. The movement must include small farmers as well as large, and must seek to establish a right understanding not only with the State, but with the very successful Consumers' Co-operative Movement. Adequate credit facilities on a co-operative basis must be provided for the financing of agricultural production. By means of a system of long-term land mortgage credit colonies of land settlers might be established on an ownership rather than a tenancy basis, and deserving agricultural labourers would find the chief obstacle to their acquisition of land removed. In Mr. Wolff's opinion the social and economic advantages of ownership over tenancy are decisive in the case of small or medium-sized holdings so long as the land settler is not required to lock up in the purchase of land the capital that he requires for its efficient cultivation.

To deal only with one or two of these points. It is refreshing to read the robust criticisms of the English system of land tenure made by Mr. Wolff when one has fresh in one's mind the rather complacent attitude to it of the last generation of orthodox economists. The nation can no longer rely on efficient service by a trinity of landlords, tenants, and labourers, each set pursuing a rival and not very enlightened self-interest. Causes of friction, whether they are the result of the relics of feudalism, or of the purely cash nexus between farmer and labourer and of the system of "tied cottages," must be eliminated, and satisfactory working and living conditions must be provided for all who live by their work if the foundations of the *rural community* are to be well and truly laid. Mr. Wolff rightly insists that agriculture is a life as well as a business, and that, however favourable economic conditions may be, it cannot flourish unless social conditions give variety and interest to life on the land. If the co-operative organisation of agriculture in its various aspects is necessary in order to put the business of agriculture on a sound economic basis, it is even more important because of the moral and intellectual qualities that genuine agricultural co-operation evokes, and because of the vigorous and stimulating "community life" which the experience of other countries has proved to be a natural

corollary to the higher organisation of farmers on a co-operative basis.

A reformed system of education in its various aspects must play an important part, and in this matter the responsibility rests primarily on the State. "For the prosecution of education the State need not stint public money." Let the Geddes Committee take note.

Mr. Wolff has studied consumers' as well ás producers' co-operation. Those seeking to establish a right relationship between the English Agricultural Co-operative Movement and the Consumers' Co-operative Movement will find his book more informative and suggestive than the recently published work on the "Consumers' Co-operative Movement," by Mr. and Mrs. Webb. The latter regard agricultural co-operation as a part of the "Capitalist System," and, without stopping to inquire whether the so-called "profits" of agriculture normally amount to more than a fair reward for services rendered, quietly ignore the fundamental community of interests that exists between farmers and urban workers, and claim economic sovereignty everywhere for the consumer.

General economic conditions favour small holdings and the intensive cultivation of the soil for the production of fruit, vegetables, potatoes, milk, eggs, butter, bacon, and the various other articles for which the teeming population of urban England affords an inexhaustible market. But intensive cultivation requires a relatively large capital; there are obstacles both financial and social to the multiplication of small holdings; and isolated small holdings are uneconomic. For mutual help and co-operation in production, purchase of raw materials, grading, standardisation and marketing of produce, small holdings must be created in groups, and the members of these groups must work together as organised self-conscious entities for these and other purposes. For the provision of working capital a network of co-operative credit societies, organised on the Luzzatti system or a modification of it, is the obvious machinery. Apparently nothing of the kind exists as yet in England. The financial obstacle to the multiplication of small holdings, preferably on an ownership basis, can be got over by the creation of land mortgage credit institutions, and here again the co-operative principle can be adopted. Mr. Wolff describes the constitution of many such institutions in Germany and elsewhere, but he may not be aware that, for the solution of a similar problem, a Land Mortgage Bank has been successfully inaugurated in Ireland. The "National Land Bank" was established early in 1920 with a paid-up capital

of over £200,000. It consists of (a) *Ordinary* Members—that is, private individuals whose share-holdings are limited to £200 each; and (b) *Society* Members—that is, "Co-operative Societies and other associations." Only co-operative societies may subscribe for shares to the value of more than £200. When a large farm or estate comes on the market, if there is a desire on the part of neighbouring "uneconomic" landholders or landless labourers to purchase it for distribution among themselves in holdings of suitable size, the latter are invited to form a Co-operative Society and apply to the Bank for a loan. The Bank then has a valuation of the estate made by its own expert valuer, and an offer that meets with its approval is made to the vendor. If the offer is accepted the whole of the purchase money is advanced by the Bank, but the Society is required to deposit with the Bank twenty-five per cent. of the purchase money involved in the form of a "Fixed Land Security Deposit." The Bank has a lien on such Deposits and thus there is a twenty-five per cent. margin of security against the risk of depreciation. Principal and interest are repayable by annuities extending over a period of thirty years and the borrowing Society is collectively responsible for the payment of these annuities. Furthermore, before actual division takes place the Bank insists on various permanent improvements in the way of fencing, draining, reclamation and the like being effected by the common labour of the members of the purchasing Society. Besides increasing the value of the land, this has the effect of training the cultivators in the practice of working together and perhaps preparing the way for experiments in collective farming which it is the policy of the Bank to foster but not to force. In any case it is expected that co-operative societies which come into existence for the acquisition of land will persist for other and more permanent purposes.

From its inception down to the 30th June, 1921, the National Land Bank had advanced £316,590, involving the transfer of 15,750 acres. It carries on ordinary banking business as well, and its total assets now approximate to one and a quarter million sterling. This is not a bad record for a country distracted by a very "incivil" war. Let us hope that in the more peaceful years of the future the movement thus happily inaugurated will extend and develop, and that in the business of rural reconstruction in particular, and in the progressive elevation of the quality of our respective national civilisations in general, the two islands will seek to outvie one another in a spirit of friendly emulation.

JOSEPH JOHNSTON

The Rural Industries round Oxford: A Survey made on behalf of the Institute for Research into Agricultural Economics, University of Oxford. By K. S. Woods. (Oxford: Clarendon Press, 1921. Pp. 180.) Price 7*s*. 6*d*.

This is a very useful supplement to the surveys of agriculture in Oxfordshire and Berkshire by Mr. John Orr and the account of Allotments and Small Holdings in Oxfordshire by Mr. A. W. Ashby which have already been published under the auspices of the Oxford Institute. It deals with the area within thirty miles of Oxford and refers to the period from March 1919 to March 1920. The book is divided into two parts—the first containing a general discussion of the economics of rural industries with a good deal of information about certain trades (*e. g.* farriery), and the second consisting of detailed reports on three groups of industries: viz. (i) the woodland industries (divided into the underwood trades, such as those which make rakes, besoms and hurdles, and, on the other hand, the timber industries, especially chair-leg turnery and chair-making); (ii) osier cultivation and willow basket-making; and (iii) "needlework and similar industries," of which the chief is the glove-making of Woodstock and its neighbourhood.

On the whole Miss Woods has done her work very well indeed, and it is practically pioneer work. In the general discussion of problems an admirable judgment is shown, and this is especially commendable because the subject of rural industries has often been a playground for well-meaning but sentimental faddists. Miss Woods has a keen eye for possibilities of development and for the economic factors upon which such possibilities depend; but she also has a sane appreciation of the dangers involved in ill-considered encouragement of rural industries (pp. 56–58, 67–68). Take, for example, her remark: "There is nothing more pathetic than the type of begging which is covered by the attempt to sell what is not really wanted, and to encourage this type of work is not charity." Defects are criticised without bias. The harm done to woodland industries by game and through the neglect of coppices and "gullies" by some of the landlords is duly noted (pp. 84–88), but Miss Woods also tells us "it is not realised by the turners, for whom the price of wood has doubled, how heavy the landlord's expenses have become, in taxation as well as in labour" (p. 109). On the one hand, we read of the high wages earned by blind basket-makers in a London factory (p. 129); on the other, of the scorn shown by professional basket-makers

for "the poor work which was turned out from some of the hospitals where amateur teachers were relied upon" (p. 133). The helpful activities of Trade Unions and Women's Institutes are referred to with discrimination.

In the survey of particular industries, perhaps the best thing is the description of the timber industries, especially chair-making. Problems connected with the growth of the raw material and with labour, machinery, designing and transport, are all carefully considered. In regard to basket-making, however, the limits of the subject are not very well kept, and the discussion ranges outside the Oxford district and beyond purely rural conditions.

The wretched rates of pay before the War, of which Miss Woods gives many instances, and the continuance of poor pay in some cases, illustrate one of the least satisfactory sides of rural industry; and a striking example is given of the exploitation of child labour by parents (pp. 39, 161). A defect of far-reaching influence is the "deplorable lack of enterprise and of commercial ability in the villages and small towns" (p. 29), and we read that "there is scarcely any co-operative effort in putting local products on the market" (p. 30). But while this is gloomy, it obviously means that the possibilities of rural industry are not exhausted.

The book is stored with curious and interesting facts. It is odd to find these country workshops supplying distant markets --parts of chairs going to Lancashire (p. 107), hurdles to the north of England and Scotland (p. 100), and barrel hoops formerly to the West Indies for sugar barrels (p. 92). "Before the War," we read, "all the Courts of Europe were clothed on State occasions in Oxfordshire plush from Shutford or Banbury." "Brilliant patterns were shown of pieces sent to Turkey and Roumania" (p. 174). A bowl-turner, one of whose lathes has been in use for more than a century, sells his wares to up-to-date establishments such as Harrods and the Army and Navy Stores. Among evidences of the play of large economic forces it is good to be reminded of the effects of individual occurrences, as when we are told that the wholesale clothing industry in Oxford "sprang from a debt paid by a linen draper to a small shopkeeper in the form of a bale of linen, towards the end of the eighteenth century," because "out of this the shopkeeper's wife made a labourer's smock, which was soon bought by a passing farm labourer," and "she sold a succession of smocks, and so the industry was built up" (p. 149).

A few criticisms must be made. At the time the survey was taken nearly all the industries dealt with were subject to powerful but temporary war-induced influences—shortage of labour or material, in some cases, but, more commonly, a booming demand, owing to absence of foreign competition and the accumulation of demands unsatisfied during the War. Miss Woods is fully alive to this fact, but it requires emphasis, because it would be unwise to frame policy on the assumption that these conditions are normal.

The plan of the book has one fault. It excludes the extractive industries—quarrying, brick-making and the like, so that (to take the Cherwell Valley alone) we are told nothing about the Portland cement works at Kirtlington, the quarry at Ardley, the brick and tile works at Deddington, or the ironstone works at Adderbury and King's Sutton. This is a pity, for these are thoroughly rural industries, and the problems of labour in extractive undertakings (*e. g.* the treatment of the problem of wet weather) often throw light on similar problems in agriculture. Thatching also is omitted, though it is really a distinct trade, and certainly no more a mere part of agriculture than hurdle-making, which is dealt with.

One or two details, again, call for criticism. There are a few cases of "vain repetition." The figures on p. 83 do not really illustrate Miss Wood's point that "on estates far from the railway prices of underwood have fallen considerably." Perhaps there is a misprint here; but the figures as they stand are quite inconclusive. On p. 101 occurs the following statement: "The increase in the use of hay-making and other machinery was mentioned in this district as a cause of the decline in agricultural earnings from those of an earlier generation, having led to less employment at piece-rates during the harvest and less employment of women in the fields." Cited without comment, this opinion is most misleading. The number of labourers has declined, but the trend of earnings was to increase even before the War, though it is true there was a set-back after the Trade Union *débâcle* in the seventies. No doubt the ratio of *extra* earnings to wages has declined: perhaps the passage quoted is due to a misunderstanding of this fact. Or does it mean that there is now less opportunity of part-time agricultural work for persons engaged mainly in village industries—or, in other words, that there is less seasonal fluctuation in the demand for farm labour now than formerly?

A word must be said about Mr. Arthur Ashby's instructive

and interesting preface. Mr. Ashby gets down at once to fundamentals, pointing out that "the use of oil-fuel and the improvement of the internal-combustion engine has to a small extent changed the conditions of industrial production" (p. 7), that the change is "altogether in favour of the small establishment," and that in transport the motor lorry may bring similar developments (p. 8).

REGINALD LENNARD

Kiangsi Native Trade and its Taxation. By STANLEY WRIGHT. (Shanghai: The Chinese Customs Service. Pp. 203 + II, with 2 Appendices.)

THE person who takes up this book expecting to find a practical application of Adam Smith's classical canons of taxation to an Eastern country will receive a rude shock. The system, such as it is, in force in Kiangsi, China, breaks every known rule of taxation for which economists have fought over a long period of years.

The Province of Kiangsi has an area of 69,498 square miles, and, according to the most recent census, the population is 14½ millions, so it is a fairly representative province to take for the purpose of investigating taxation in China. The question of internal trade taxation in that country is one on which much has been written in a general way, but little attempt has ever been made to isolate a province and to study in detail either the methods of trade taxation offices within its confines or their influence on the trades taxed. This book is therefore very welcome.

The Chinese seem to look upon trade as an inexhaustible reservoir into which innumerable hands may dip for revenue. Less than a century ago Kiangsi trade boasted only two taxing establishments, namely, the Native Customs for the Poyang-Yangtsze trade, and that for the traffic up and down the River Kan, but to-day the Kiangsi merchant has to reckon with seven or eight trade-taxing establishments, each spreading its tentacles out over a wide area. In the past, provided he paid the tax, plus certain non-official "squeezes," he was free to go his way, but now he is surrounded by difficulties too numerous to mention. The trader cannot move a single package of goods even for a short distance overland without encountering some form of tax-gatherer. Custom is the guiding principle, and the Central

Government, vying with the Provincial officials, is always on the alert to get a little more out of the unfortunate people.

The taxes are many and varied: native customs, transit dues, consumption taxes, maritime customs, railway taxes, salt taxes, payments to rice, wine and tobacco bureaux, redemption taxes and Likin taxes are a few to which goods are subject, and all, in one form or another, take their toll on trade.

The Likin tax, which was first imposed in Kiangsi in 1857, had already been in operation in parts of China for some three of four years. It is an internal tax on goods in transit, and owes its origin to the Taiping Rebellion, when it made its appearance as a war tax. The word Likin is derived from "Li," meaning one-thousandth, and "kin," meaning gold or money. Originally it was a tax of one-tenth of 1 per cent. of the value of the goods, but the precise amount payable at the present day in Kiangsi and elsewhere in China is arbitrarily determined by local officials. It has proved so fruitful a source of revenue that Likin barriers have multiplied in number, until to-day the hapless Chinese trader encounters them up and down all the rivers, in most of the principal towns and on most of the byways of importance. Between Canton and Wuchow, for instance, there are said to be no fewer than six Likin barriers, at each of which a toll is collected. The development of this form of taxation is shown to have been extremely rapid in Kiangsi, and posts for its collection have been established at all the leading trading centres and commercially strategic points in the Province. The officials are stated to be able not only to levy definite taxes on anything and everything that passes the barriers, but also to fix charges at a much higher rate than obtain in some of the other Provinces. With the ratification of the Mackay Treaty China officially recognised the evils of the Likin system, and hopes were entertained in Kiangsi that it was doomed. Reforms were certainly attempted, but they were illusory. Among other things, it was proposed that instead of a dozen imposts at successive barriers, the tax might be levied in one sum at the first barrier post. New regulations were issued to make the alteration effective, but the local officials and others soon found a way of getting round Government decrees. For example, new trade taxes under Likin control were created from time to time; principal among these were the railway tax and the bank-note tax. Merchants soon found, too, that payment at the first barrier passed did not really exempt their goods from other imposts at further barriers. Man shui, or short-levied duties, were instituted; these are not, as might

be expected, levies on excess of cargo, they are simply additional charges under a make-believe name. One of Mr. Taylor's examples will make this clear. Rice from Fuchow pays a tax, called shih fên, at Huangchiangk'ou; on reaching Hsiehpu it is called upon to bear an extra levy of 5 per cent. on the original tax; when passing Tuch'ang, another levy of 10 per cent. is made on the first tax, and at Kulang still another 13 per cent. is levied on the original tax. At Hukow an export levy of more than three times the shih fên is chargeable, plus 10 per cent. of this duty for a tax called hao-yin. Then, in addition, there is the railway tax of 20 cents, and a chiu chiu tax of 15 cents each per shih. In other words, a consignment of rice from, say, Fuchow to Kiukiang has to make eight distinct payments in five places, and all of them are under control of the Provincial official. In the circumstances, what the Government called the "t'ung-shui" (a consolidated tax paid once and for all) is a polite fiction.

Of protests, passive and active, against the exactions there have been many; some end in civil strife and lead to attempts to improve matters. A tariff to this end was issued in September 1916, stipulating that goods which passed through three barriers shall pay the full shih fên duty, those which pass two barriers five fên, and those for local consumption, that is, passing only one barrier, to pay three fên. All this has been of little avail. Separate offices ignore the fact that the tax has been paid elsewhere, and proceed to levy their own dues according to their own lights.

The sole object of the Likin tariff, states Mr. Taylor, is to raise revenue, and from a perusal of his interesting book one is forced to the conclusion that the object is not necessarily to raise that revenue in as equitable a way as possible. Traders in the United Kingdom would be driven to distraction were they faced with exactions like those from which the Chinese suffer. A summary of the tariff given by the author will give some idea of the burden imposed upon the native traders. As it stands the tariff contains about 1500 entries, and, to take only one example of the specific duties named, over 200 are quoted for different varieties of one single article, paper. China tea, graded according to quality and place of production, claims 47 entries; China-ware, which is taxed according to the destination to which it is consigned, has 43 entries with 39 sub-entries, in which every conceivable basket, packet or bundle is included; timber is let off with 42; grass-cloth has 37 entries, while nankeens have only 24.

Of hair-splitting differentiations there are many, and their purpose is, first, to allow nothing to escape that can be made to yield revenue, secondly, to provide opportunities for accommodating adjustments; if one heading of tax will not cover an article, then the collector can soon find another.

There is little chance of avoiding taxation by taking diverse routes. The Kiangsi Likin establishment has its head office at Nanchang, 16 sub-offices at leading trade centres, 38 sub-stations and 117 barriers, the whole, as Mr. Taylor shows, forming a fine network to escape through the meshes of which would tax the ingenuity of even the most accomplished smuggler.

It is not to be supposed for one moment that the Central Government reaps the full benefit from the collections. Far from it. *An official return gives the total Likin collection for the* Province as "Kuping taels 453,548.1990 × Cash 2,389,073,979," which at the usual conversion rates (Kuping taels 101.64 = Haikwan taels 100 = \$150. Cash 1,280 = \$1—the Likin official rate) comes to about \$2,500,000, a total which, one agrees with the author, errs on the side of modesty. As showing the leakage that occurs, he places the average Likin revenues of Kiangsi at \$4/4,500,000, exclusive of other receipts, and of all extra dues levied at Hukow, such as the railway tax, etc.

The office of the Chinese Maritime Customs is well described, and the spirit animating the whole institution is stated to be one of sympathetic encouragement of trade, a spirit which is not at variance with its primary function, the protection of the country's revenue. But the Chinese Maritime Customs are mainly under foreign control, the Likin is not.

There are many minor taxes on trade and commodities in the Kiangsi Province, all of which are carefully passed under review by the author, but to understand the reasons for them will puzzle the brain of the most earnest student of economics; to get a clear comprehension of the Chinese method of taxation and all that it entails requires patience, and to have produced an intelligible account of the multifarous duties and their effects must have been no mean task for Mr. Taylor. What will probably strike the reader of his book is that, numerous as they are, the taxes, even as collected at present, have the merit of productiveness, but their method of collection is flagrantly uneconomical, and the equity of their incidence is, in most cases, extremely questionable.

The pages in the book on the currency question are illuminating. The influence of the defective monetary system and the

instability of exchange is, of course, felt all over China, but its restrictive effect is plainly seen in a backward Province like Kiangsi. As usual, we meet with the two official taels, the Kuping and the Haikwan tael; then every trading centre has its own particular tael. Kuikiang has two, the Tsaop'ing and the Hong tael. Large transactions are carried out in taels; for petty trade resort is had to the domestic money of the Chinese --copper cash, or local cash shop-notes, the issues of which are legion. The area and validity of the notes is very restricted, and they frequently entail loss to the trader who has to resort to exchange transactions outside the area in which they are issued. Then there is the copper cent money, introduced about thirteen years ago. This money has grown in favour, but is still far from supplanting the copper cash. The quantities of copper cents put into circulation have been enormous, and the nominal value of the cent as a ten-cash piece no longer holds good in any locality, its value fluctuates from time to time and from place to place, and the effect on the cost of living for the poorer classes is ruinous. To add to the prevailing chaos, one gets the Mexican dollar and small subsidiary silver coins, all of which lack fixity in exchange. Dollar notes, issued by the Republican Bank of Kiangsi, the Bank of Communications and the Bank of China, also circulate, and public confidence in the notes is by no means stable. Then for larger transactions there are the shoes of sycee silver, to calculate the value of which much time is lost in taking count of weight (never the same in two places), fineness, "look-see," "olo" custom and exchange.

In such circumstances, the merchant who can move with sure foot through this bewildering tangle of sycee, cash, cash shop-notes, copper cents, dollars, small silver and bank-notes, the relation between any one of which and all the others changes daily, shows no mean skill in financial or mental gymnastics, and it is this skill which Mr. Taylor considers makes the Chinese trader a keen bargain-driver. The element of uncertainty, too, as he points out, may appeal to the Chinaman's gambling instinct, but at the same time it is obvious that before any sound expansion of trade can be accomplished, this chaotic monetary system must be replaced by a secure and stable standard.

It is a pity that such a useful work as this lacks an index, added to which, neither the price of the book nor the publisher's name is stated.

WILLIAM F. SPALDING

Le Relèvement Économique de la Grèce. By E. J. TSOUDEROS, Member of the Greek Parliament, Greek Delegate at the Peace Congress. Preface by CH. GIDE, Professor at the University in Paris. (Paris: 1920. Berger-Levrault. 254 pp.)

THIS book gives a vivid and most interesting account of the economic resources of Greece, as well as of the actual problems which confront her economic policy. The first chapter (pp. 1–58) is of special interest, inasmuch as it contains a statement of the financial situation in Greece since 1898, and enumerates the reasons which determined the Great Powers to impose upon her international financial control. The author describes the organisation of this control and its results, and shows how it ought to be modified in order not to prove a further obstacle to the future economic development of the country, the difficulties of its task being increased by the acquisition by Greece of Macedonia, Crete and the islands of the Ægean Sea.

Mr. Tsouderos depicts in picturesque detail the organisation and working of education, and describes the advances made by his country. In this connection he mentions the agricultural reform which aims at converting the big estates, founded under the Turkish regime, in Macedonia as well as in Thessaly, into small peasant-holdings.

Agriculture, her mercantile marine and foreign trade are the principal sources of Greece's prosperity, and she is going through a period of genuine regeneration, and may continue to progress. Nevertheless, there remains much to be done, especially in the perfecting of her railway system. This network, once completed, with the assistance of the Greek mercantile marine, will be of the greatest use and importance not only to Greece herself, but also to Asia Minor and Central and Western Europe.

The author wisely considers (p. 214) that the interests of the countries concerned will determine the revival of commercial relations in the Balkans. He contemplates an economic arrangement between Serbia, Roumania and Greece, leading to a reduction of the existing protective duties, and to the recovery of banking and of general economic relations between these States; Bulgaria also should take part later on in this intercourse. In this way the path would be opened to a more permanent understanding, leading ultimately, in all probability, to a Balkan Customs-Union.

E. SCHWIEDLAND.

NOTES AND MEMORANDA

WAS RYE EVER THE ORDINARY FOOD OF THE ENGLISH?

IN the ECONOMIC JOURNAL for September, 1921, Sir William Ashley has published an article in which he gives reasons for disagreeing with the opinion of my father, the late Professor Thorold Rogers, that "from the earliest times wheat has been the principal grain on which the English have lived," and suggests tentatively that "during the Middle Ages, and long after, rye was the ordinary food of the labouring population. . . . Wheat was at first a luxury food for the landlord class. From them it was adopted by the merchants of the towns and by the more sedentary and more skilled craftsmen. . . . For the mass of the people, both in the towns and in the country, there was hardly ever, and hardly anywhere, a complete change over from rye to wheat, the transition was effected by the use of a mixture—maslin—of rye and wheat . . . in which in the course of ages the wheat proportion tended more and more to preponderate." In support of his contention, Sir William Ashley has adopted two lines of argument, (1) A criticism of my father's scholarship and accuracy; (2) the selection of a number of quotations and references tending to show that rye was always considered an important article of food. No exception can be taken to the tone of Sir William Ashley's examination of my father's views, and I acknowledge with gratitude his handsome appreciation of the monumental character of his work, but as he admits that my father's writings "serve as the authority for much of what is now being taught as history to working-class audiences," it is more than a matter of private interest to ascertain whether the one authority or the other is more correct. I venture, therefore, to advance certain reasons which may lead Sir William Ashley to revise his judgment. In the first place it should be pointed out that there is no true antithesis between the two propositions. My father was speaking of the usual food of the English nation as a whole; Sir William Ashley admits that the landlord class, and subsequently the merchants and skilled craftsmen, ate

wheaten bread, but contends that rye formed a large part of the food of the labouring classes. An examination of my father's writings shows that he agreed that "barley was sometimes mixed with the wheat in the allowances made to farm servants,"[1] and that oats, pease and beans were also mixed with their food.[2] Scurril wheat was also commonly eaten, especially in times of scarcity.[3] No one asserts that the workers habitually ate bread made of the best wheat only. The question is simply whether their bread consisted wholly of rye in the earliest times and whether the adoption of wheat as a mixture was gradual and progressive.

In attempting to shake the credit of my father's conclusions Sir William Ashley confesses to certain "harassing doubts." First, "How much is involved in the statement that he has generally omitted all notices of inferior grain elsewhere explained as inferior qualities?" The answer is given in my father's own words: "Except in rare cases, purchases and sales of inferior corn, *known in the accounts as scurril or cursal corn*, are omitted."[4] Obviously, therefore, all wheat is included except that expressly described as cursal. There is no great scope for error here. Secondly, we are asked, "Did he always recognise rye when he met it? Under the year 1303 he gives one entry for sigal and does not attempt an explanation;" but Sir William Ashley has overlooked the fact that on page 222 of Volume I. of the *History of Agriculture and Prices*, my father says, "Sigal, I have no doubt, is the same as rye (siligo in the accounts)." After this is it quite fair to say that "Fleetwood, like Rogers, when he happens to come across rye, does not recognise it"? Thirdly, he asks, "Can we be sure that Rogers' wheat is not sometimes a translation of the undifferentiated bladum?" A reference to page 3 of Volume II. shows that certain entries classed under rye are marked B to show that they are "the Bladum of the records." So that it appears that it is not only never classed as wheat, but is even used to swell the records of rye. I hope these notes will show that Sir William Ashley's doubts were unwarranted.

There remains the more important question, How far was

[1] *History of Agriculture and Prices*, Vol. I, p. 26.

[2] *Op. cit.* p. 288; also Vol. II, p. 626. "Idem respondet de xix qrs. v bsls. curall frumenti, ix qrs. vj bsls. dragei, et x qrs. vj bsls. pisarum simul mixtis pro liberatura famulorum."

[3] *Op. cit.* p. 288: "The grain served out was generally wheat, not always the best, but cursal or scurril corn, such, perhaps, as Hampshire people call tailings."

[4] *Op. cit.* Vol. II, p. 4. See also Vol. I, p. 182.

rye used for food by our ancestors? Now rye is still occasionally grown in England, though it is no longer used in making bread. It was not, however, widely grown in the eighteenth century. Lisle, whose observations were made between 1695 and 1722, over the southern and midland counties, says, "Rye is a grain seldom sown in the counties I have been most conversant, and as for my own experience, it has been very little in it." [1] Ellis says, "The men about Cheddington and Aylesbury never so much as attempt the sowing of this grain." [2] Arthur Young records only thirteen places where rye was grown, and practically none in the south of England.[3] In the seventeenth century Worlidge admits that he does not know much about rye, "it being not universally propagated." [4] The earlier writers, *e. g.* Markham and Fitzherbert, just refer to it, but give no indication that it was widely grown. It is not mentioned by Walter of Henley. An examination of the manorial records other than these printed in the *History of Prices* shows that it was seldom grown. Rye was not grown at Crondal in Hampshire in the thirteenth century,[5] or at Fornectt in Norfolk,[6] and out of the thirty-two manors in which corn was produced for the Bishopric of Winchester in 1208–9, rye was grown in only six.[7] To go back even further, we find in King Alfred's charter dealing with the Manor of Hysseburn, that the churls are bound to render at harvest equinox, among other things, "three sesters of bread wheat," and as they are bound to plough three acres in their own time and sow it with their own seed, we may fairly assume that they lived on the same kind of bread themselves.[8] After this perhaps we need not take Sir William Ashley's suggestion that "frumentum" means any kind of corn in classical Latin seriously. It will hardly be contested that the "frumentum" which Tacitus tells us Agricola exacted as tribute from the British was rye.[9] This evidence, which could be expanded if space permitted, does not lend any support to the theory that

[1] Lisle, *Observations in Husbandry*, Vol. I, p. 270.

[2] Ellis, *Chiltern and Vale Farming Explained*, Chap. xxxv, p. 252.

[3] Young, *The Farmer's Tour through the East of England*, Vol. IV, pp. 250–7.

[4] *Systema Agriculturæ*, by I. W., Sect. VII, p. 54.

[5] *The Crondal Records*, edited by F. T. Baigent for the Hampshire Record Society, 1890.

[6] Davenport, *A Norfolk Manor*, 1086–1565.

[7] Gras, *Evolution of the English Corn Market*, pp. 261–2.

[8] *Codex Diplomaticus*, MLXXVII.

[9] Tacitus, *Agricola*, XIX: "frumenti et tributorum exactio." See also the speech of Calgacus: "Bona fortunæque in tributum, ager atque annus in frumentum."

rye was at one time the ordinary food of the labouring classes in England and that it was only gradually replaced by wheat. It is, in fact, quite probable that more rye was consumed as bread during the latter part of the thirteenth and of the sixteenth centuries, when prices of wheat were rising, than in the centuries that immediately preceded or succeeded them. Miller appears to think that the low price of wheat in the early part of the eighteenth century was a good reason for not sowing rye.[1]

Again, Sir William Ashley appears to consider that the known prevalence of rye bread over wheaten bread in the northern counties of the Continent is *prima facie* evidence that a similar state of things existed in England. But even in the fifteenth century the contrast between this country and France was patent, as the well-known passage in Fortescue's *Governance of England* shows. He says that the French "drinken water, thai eyten apples, wit*h* brede right browne made of rye, thai eyten no flesshe but yf it be right seldon a little larde, or of the entrales and heydes of beastis slayn for the nobles and marchauntes of the land. . . . Thai gon crokyd and ben feble not able to fight nor to defende þe realme; nor thai have wepen nor money to bie them wepen wit*h* all. But verely thai leven in the most extreme pou*er*tie and mis*er*ie, and yet dwellyn thai in on the most fertile reaume of the worlde. . . . But blessyd be God this lande is rulid under a better lawe; and therefore the people thereof be not in such peynurie nor thereby hurt in their p*er*sons, but thai with welthe and have all things necessarie to the sustenance of nature." [2]

But there is no doubt that rye has been sown in England in all periods of history. The question is, for what purpose? At the present time rye is sown because it affords the earliest green food for sheep or cattle in spring,[3] or for its straw, which

[1] Miller, *Gardeners' Dictionary*, sub. "Secale."

[2] Fortescue, *The Governance of England*, Chap. iii, p. 114. Edit. Plummer, 1885. Clarendon Press. Mr. Sydney Herbert of the University College of Wales, Aberystwyth, has kindly drawn my attention to the following passages in Coryat's *Crudities*, which indicate that in 1608, when the author made his journey through France, the amount of rye produced in this country was small compared with the crop in France, though it is admitted that at this time other cereals than wheat were commonly used in England for bread. "The abundance of Rie in France is so great, even in every part thereof, through which I travelled that I think the hundredth part thereof is hardly to be found in England and Wales" (Vol. I, p. 195). "In many places also [in Savoy] I saw goodly corne fields, especially of Rie, whereof many thousand plottes I observed before I went forth of the Alpes, growing upon as steep places as the Vineyards did" (Vol. I, p. 219, Edition 1905).

[3] Stephens, *Book of the Farm*, Vol. II, p. 370.

makes good litter and the best thatching material. Its value for the first purpose has long been known. Miller says, "It is also sown in autumn to afford green food for ewes and lambs in the spring, before there is plenty of grass.[1] Ellis records a case of a common field tenant who sowed rye "for only his sheep to feed on in the spring"; [2] and Mortimer says, "To have food for cattle in *April*, which is the scarcest time of all the year, especially for sheep and lambs, some split the ridges of their wheat stubble and sowed them with rye, allowing about a bushel to an acre, which they harrow in and feed about April or when they want it, and in May plough it up for a fallow." [3] I do not know of any earlier reference in agricultural treatises, but as the problem how to feed sheep in the spring was even more acute in the Middle Ages than in Mortimer's time, I suspect the practice referred to was much older. It is possible, therefore, that Thomas Sampson sowed those twenty-two acres of rye partly for the benefit of his 300 sheep, for Suffolk is not a county of pasture.

However, we must admit that rye was frequently eaten mixed with wheat, not only in times of scarcity when barley, oats, pease, vetches, but even buckwheat were eaten, and occasionally acorns, roots and so forth,[4] but in times of plenty. Wheat and rye are even sown together so as to secure a complete mixture. Miller says, "Although it is by some accounted good when mixt (with wheat), yet it being so very clammy, few people who have been fed with wheat will even care to eat the bread made of this.[5] Eden admits that rye can seldom be made so pleasant and palatable as admixtures of other sorts of grain.[6] Worlidge alone says, "It gives a very pleasant taste to most appetites." [7] Why, then, was it so commonly used? The explanation is given by Hale: "A small quantity of it was formerly, and still is in several places, mixed with wheat in the making of bread on account of its keeping the bread moist, and then it is attended with no ill consequences." [8] During the Middle Ages and long after the bread of the landworker was baked no more often than once a week. In order to prevent the terrible hardness when stale to which bread made from

[1] Miller, *Gardeners' Dictionary*, sub. "Secale."
[2] *Chiltern and Vale Farming Explained*, p. 250. For another case see p. 255.
[3] Mortimer, *The Art of Husbandry*, Book V, chap. i, p. 126.
[4] Gras, *Evolution of the English Corn Market*, p. 38.
[5] Miller, *Gardeners' Dictionary*, sub. "Secale."
[6] Eden, *State of the Poor*, Vol. I, p. 526.
[7] *Chiltern and Vale Farming Explained*, p. 250. For another case see p. 255.
[8] Hale, *Complete Body of Husbandry*, Book VI. Cf. Rye.

English wheat is liable, rye in varying proportions, never more than 50 per cent., was mixed with the flour, just as in modern times potatoes are boiled up with the wheat by English housewives who bake their own bread.

This explains the use of maslin in former days, but it lends no support to Sir William Ashley's contention that during the Middle Ages, and long after, " rye was the ordinary food of the labouring population over the greater part of the country." The almost complete absence of any definite evidence that rye was ever consumed alone, the certainty that in many cases labourers and even dogs consumed bread made from a wheat of some kind, though admittedly inferior, the explanation of the reason why rye was sometimes mixed with wheat in making bread, all point, it is contended, in the same direction and lead to the conclusion that " wheat was the customary food of the English people from the earliest times."

A. G. L. ROGERS

OFFICIAL PAPERS

Report of the Commissions appointed by H.E. the Governor of the Straits Settlements and the High Commissioner of the F.M.S. on the Present State of Trade Depression brought about, in the main, by the continued Depression in the Rubber Industry, and on the Extension of Credit Facilities. (Singapore, 1921.)

THIS is a brief report made by practical men, who spent little time in proving that depression existed. With few preliminaries they went straight to the question of averting the disaster that threatened the Malay Peninsula, and they completed their report in October, within six weeks of the date of their appointment.

They start by recording the refusal of the Government in April 1921 to introduce a measure for compulsory restriction of rubber output, and their consequent desire to find a remedy that would avoid compulsory action on the part of the Government. They fail, however, to find any such remedy and conclude by urging Government to reconsider the matter. Incidentally, having looked into the state of trade and credit generally, they also recommend a relaxation of the burdens borne by the tin-mining industry, the encouragement of new industries by Government, and the establishment of a Land Bank to make advances against crops.

The Commissioners refrain from suggesting in detail what restriction of rubber output should be enforced. Probably they felt that any details would be contentious and open to criticism and that the main thing was to get Government to move at all; any Government measure would have a valuable moral effect on the market, and if it proved also to be the actual physical remedy for the existing difficult position so much the better. What is the position? Rubber was selling at about 2*s*. 6*d*. a lb. at the beginning of 1920; it had fallen to about 1*s*. by the end of the year, and has stood below that price ever since. Restriction of output in 1921 has checked the further accumulation of stocks, but they still amount to a figure in the neighbourhood of 80,000 tons, and the revival of demand from America, the great consumer of rubber, has not materialised in the way that was expected, for though there has recently been steady buying from New York it has not raised prices more than a couple of pence.

British Malaya produces about 58 per cent. of the world's supply of plantation rubber, Ceylon (with S. India) about 15 per cent., and the Dutch East Indies 25 per cent. Few estates in Malaya can produce rubber at 1*s*. a lb., especially when their output is restricted, for much of their expenditure is incurred irrespective of crop. But in Ceylon and the Dutch East Indies the position is different, and in all the attempts that have been made to secure general adherence to a policy of restriction, the support from these two countries has been hesitating and lukewarm; it is now pretty clear that they have no intention of adopting any regular plan of restricting output.

The Singapore Commission thought Government should attempt to bring the other countries, or at least Ceylon, into a restriction scheme, but they were not very hopeful of this, and asked many of the witnesses who appeared before them whether they believed in restriction for British Malaya alone. Most of the replies were in the affirmative: witnesses thought any action better than mere drifting. Attempts were made to estimate the effect on the dead-weight of existing stocks if a 50 per cent. restriction were introduced. It was agreed that Ceylon and the Dutch planters would gain by the higher price that would result, but nobody could do more than guess at the actual increase of output which these unrestricted rival producers might find it possible to obtain. Restriction in Malaya alone would certainly appear a most hazardous leap in the dark.

It was also evident to the Commission that credit would have to be extended to many estates to enable them to continue culti-

vation, since Government could not take steps to restrict the tapping or export of rubber without affording planters some means of existence. In fact the report practically recommends a large measure of Government assistance and control. That this will be introduced is doubtful; it is not a policy that would appeal to the Imperial Government, and the Straits Government, even if otherwise favourable, would find it a very serious financial obligation.

What are the alternatives? The obvious one—for the industry to help itself—appears in practice hardly worth considering. It is estimated that 100 million sterling is invested in rubber cultivation in British Malaya alone, but the industry is hopelessly petty and disorganised; there are hundreds of small plantation companies, English, Dutch, French, Chinese, Japanese, etc., and any semblance of combination on the part of these is liable to be rendered useless by independent action on the part of the innumerable small native owners. The big amalgamations which have pulled so many other industries together are much overdue. In this country the Rubber Growers' Association has striven laboriously and honestly to meet the present crisis, but inspired leadership is lacking and the Association has recently failed to secure sufficient adherents to its proposal to continue the partial restriction which it established in November 1920.

The other alternative is to "let be," and force of circumstances will probably ensure the ultimate triumph of this simple but ruthless economic remedy. The industry is sound enough; rubber is a necessary, and at anything like its present price the synthetic article is not likely to be introduced. No doubt, too, the demand will steadily increase during the next few years. Much attention has lately been given to the discovery and encouragement of new uses for rubber, and though these have not yet had time to make themselves felt, it is safe to anticipate that some of them will be successful, and that, as manufacturers feel more certain that rubber is likely to remain at a comparatively low price for some time ahead, they will make their plans for putting on the market new products which they could not have contemplated selling when rubber was 2*s.* 6*d.* a lb. and higher. And while this process is going on, absorbing stocks and reviving demand, it may be expected that enforced attention to economy will have gradually reduced costs of production, so that eventually the equilibrium between demand and supply will be re-established in the natural course of events. But many a weak Company will go to the wall in the process.

OBITUARY

Lord Bryce

The Economic Society has lost a distinguished Vice-President. The office had been held by Bryce since the beginning of this century. He was an original member of our Society, and took occasional part in its social meetings. If he did not advance economic theory, he contributed much to the knowledge and judgment which are required for the art of Political Economy. His various writings abound in information and reflections which concern the practical economist. We might instance the chapter on *Laissez faire* in his *American Commonwealth*, the remarks on the economic resources of Argentina and other States in his *South America*, and in the latest—perhaps the greatest—of his works, the reflections on "economic equality," not omitting the "stubborn fact of natural inequality." To collect all the lessons of economic wisdom that may be gathered from Bryce's writings and public life would be a colossal task. It must suffice to present one branch of his activities, one connected with many other branches, his academic career and interests. This side of Bryce's life has been sketched for us by one who is well qualified to handle the subject, the Provost of Bryce's College, Oriel. Mr. Phelps writes :—

"When it was first proposed to appoint a Commission to inquire into the state of Oxford and Cambridge, representations were made to Mr. Fisher that the time had come for an inquiry into the relations of the Universities of Great Britain *inter se*, their co-ordination and co-operation. The suggestion was set aside as too ambitious; but, be that as it may, one reason for it in the minds of those who made it was that such an inquiry should be held whilst Viscount Bryce could preside over it. For, in truth, no man had so wide an acquaintance with Universities, their history and their methods. Go where he would—and where did he not go?—the local University hastened to do him honour. The Oxford Calendar credits him with no fewer than fifteen honorary degrees, and probably it is not exhaustive. Certainly it is striking to find that a man, who was in so true a sense a public servant, and a citizen of the world, should have kept his hold on learned and educational circles everywhere. But it will not come as a surprise to those who knew

him. They can appreciate the power which was his of combining a wide range of interests with a close and intimate sympathy. It was not that his mind was divided, as it were, into compartments, each independent of the rest, but the lessons learned and the illustrations found in a field of observation were promptly applied. His correspondence, which we all hope may see the light, will give abundant proof of this. Thus when he was at Washington, as Ambassador, he would write letters, and long letters, which might give the impression that his one interest lay in the state of Oxford, its studies and its teaching. And seeing as he did the inner life of so many and various types of University, he was always ready to suggest changes which experience recommended, or to give a warning against such as had been tried and had failed.

"With his own University of Oxford he was closely connected for some sixty years. A scholar of Trinity and a Fellow of Oriel, he was Regius Professor of Civil Law from 1870 to 1893. It was not perhaps the happiest of his many experiences. The conditions of his tenure of the chair were embarrassing, the attendance at his lectures was mediocre and its quality often something less. But the fact that it kept him closely in touch with Oxford was very welcome to both. It was said of him in the daily press that as a speaker in Parliament he was 'professorial.' To those in Oxford who know professors it was a cheap and misleading criticism. The constant insistence on a limited range of subjects was never his weakness, in conversation he was never didactic. Rather he came as a visitor from the outer world and brought with him the practical insight, the robust common sense, and the wide outlook which are sometimes lacking in academical circles and discussions. His talk was stimulating and humorous. He had 'a true sense for his object of study and a single-hearted care for it,' and he kept himself free from any excess of allusion, whilst giving constant proof of his wide reading and the strength of his memory. He would by a single sentence raise a question from commonplace, showing, as a lawyer should, what issues were really involved in what might seem to be insignificant. His humour was singularly free from personal malice and spontaneous, for he delighted in a situation or a comedy. Later on, when he had seen life under every variety of conditions, he would illustrate and compare to the point of conviction. His breakfast parties and his common-room talks were instructive without tedium and stimulating without artifice, for there was a total absence of pose. Young

men hung upon his words, for his sympathy never weakened; oldsters felt a twinge of shame at their own want of knowledge or enthusiasm. So for Oxford he represented the culture which is characteristic of the best kind of general education, which, whilst valuing highly the results of research, shows itself in a general acquaintance with and appreciation of all the best products of the best minds, and is content to 'enjoy what others understand.' Thus, for instance, in economics he was not deeply read, but he knew the importance of the part played by economic forces in the world and insisted on it. He had absorbed the principles of Ricardo and Mill, and never lost his hold on them; they fell into the background of his mind and coloured his judgments. He was far from being a Socialist in spite of his warm feeling for humanity. He was an optimist in the sense that he realised the variety rather than the limitations of human nature, and the hope which it gave of improvement. He kept to the last a robust faith in the future of his fellow-men, free from the excesses of sentiment and the glamour of rhetoric. He was in full sympathy with the many philanthropic movements which have caught the imagination of young Oxford. He could speak of the problems of the hour with a sense of reality which was a valuable corrective, and with an unfailing freshness which threw a new light on the familiar questions. It would be difficult to give any idea to those who did not know him of the influence which he had and the encouragement which he gave, for they gained strength from the affectionate charm of his manner and the grace of his phrase."

We could not improve on Mr. Phelps' living portraiture of mind and character by a recital of biographical details which, relating to so conspicuous a career, are either already well known or are easily accessible to our readers.

Arthur Raffalovich

The death of the great financier (December 23, 1921) was unexpected. He was to have read a paper to the *Société d'Économie Politique* in the first week of January. But at the meeting it devolved on Mr. Schelle to deliver a funeral *éloge* in honour of his lost friend. The subject of the intended discourse was one on which Raffalovich held decided opinions—the relation of Government action to the Labour Market. *Laissez faire* and sound currency were powerfully advocated by him in numerous periodical publications. The most complete expression

of his financial views is to be found in the *Marché Financier* initiated by himself in 1888. He was a frequent contributor to the *Journal des Économistes.* His annual review of the Money Market, published in that Journal, was continued up to his death. The January number of the Journal presents *Le Marché Financier en* 1921—the *novissima verba* of the distinguished writer. He also wrote often in *L'Économiste Français;* in latter years exposing with merciless logic the economic follies of the Bolsheviks. He may be said to have been qualified by birth to speak of Russia as well as of finance; for he was a Russian by origin, born at Odessa sixty-eight years ago, the son of a great banker. His contributions to periodical literature were more important than the books of which he was the author.

ALFRED MILNES

WE regret to announce the death of Mr. Alfred Milnes, sometime External Registrar in the London University, and for many years a teacher of Economics to Candidates for the India and other Public Services; also Lecturer for the University Extension Society. The singular lucidity of his expositions was highly appreciated by his pupils. One of them writes to us as follows :— "It was just his desire to explain the elements of his subject in the simplest possible manner which made Dr. Milnes' teaching of so much value to the beginner. A famous Professor having remarked in his presence that 'the Foreign Exchanges cannot be taught in the class-room,' he took up the challenge, and is generally acknowledged to have made this difficult subject fascinating. It was this same quality of lucidity which made him one of the leading exponents of the fundamental principles underlying the policy of Free Trade. Here was a doctrine, in his opinion, only to be fought on the basis of broad economic truths, and when he expounded his beliefs they appeared almost unassailable. He held that if Free Trade were again lost, this would be chiefly due to the fact that its supporters too often tried to defend it by dealing with particular cases; just as Mr. Joseph Chamberlain made the particular industry the backbone of his last campaign. A time was bound to come when industries as a whole would suffer from a severe slump, and those who preached Free Trade on the basis of the prosperity of certain industries would find the ground cut from beneath their feet. The list of his published economic works is not long: *From Gild to Factory, Problems and Exercises in Economics, The Economics of Reconstruction, Economics for To-day.* Perhaps

his mind is seen at its best in a pamphlet entitled *The Economics of Fairy Lore,* in which he interpreted the well-known old fairy stories in the light of economic allegory, using them in a charming manner to illustrate some of the fundamental economic truths."

Current Topics

The following have been elected to membership of the Royal Economic Society :—

Adgie, R. F.
Anstey, Mrs. V.
Aung, Maung Twa.
Bennett, W.
Bhattacharje, Prof. B. K.
Bliven, Bruce.
Brown, Lathrop (life).
Butler, Miss E. R.
Byas, Hugh.
Byrne, J.
Calcutta University.
Carpenter, G. F.
Clover, R. E.
Crofton, R. H.
Davis, J. S. (life).
de Haas, Prof. J. A.
Dobbs, A. C.
Docker, F. D., C.B.
Draper, E. G.
Duff, J. F.
Evans, D. E.
Federal Reserve Bank of Boston, Mass.
Fenelon, K. G.
Frankel, H.
Garvan, J. J.
Goldschmidt, D. J.
Goodall, F. C.
Guerrero, H. D.
Harrison, L. H.
Hijikata, Prof. S. (life).
Holt, Prof. L. H.
Howard, H. F.
Hyde, D. Clark.
Ilott, J. M. A.
Jain, Seth P.
James, Francis, B. (life).
Johnston, Joseph.
Joshi, J. V.
Judge, B. O.
Kale, Bhasker T. (life).
Kerr, H. C.
Kesari Singh, P.
Lancaster, E. S.
Larmor, W. J. (life).
Launder, G. E.
Leffingwell, R. C. (life).
Lemberger, J.
Lewis, Richard B. (life).
Mackintosh, Lieut. A.M.
Michael, P. H.
Middleton, C. F.
Mittelman, E. B.
Monroe, J. H.
Nath, Surendra.
Olphert, J. W.
Pant, Prof. D.
Quick, A. E.
Raja, R. G.
Ramanathan, P.
Ramsbotham, H.
Reed, W. G.
Rossmoore, E. E. (life).
Rhodes, Miss D. E.
Rustomji-Lalkaka, D.
Sastry, K. R. R.

Scadden, T. C.
Sherrington, C. E. R.
Slater, Malcolm H. (life).
Spencer, John.
Stewart, Bryce M.
Subrahmanyan, N. S.
Thompson, G. F.
Tolkowsky, L.
Unione Regionale Industriale, Naples.
Unni, K. S.
Valentine, Miss M. E.
van Oldenborgh, J.
Varahanarasimham, Prof. V.
Von Tungeln, Prof. G. H. (life).
Walters, F. Y.
White, J. Dundas, LL.D.
Wilson, Miss J. B.
Woodworth, L. D.

The following have been admitted to library membership :— Grinnell College, Iowa; Department of Industries, Government of India; Pisa University Library.

An Order has been published by the Board of Trade providing for a Census of Production to be taken in 1923.

The officers of Section F of the British Association, which will meet this year at Edinburgh, are as follows :—President, Professor Edgeworth (All Souls College, Oxford); Recorder, Professor H. M. Hallsworth (Armstrong College, Newcastle-on-Tyne); Secretary, A. Radford, Esq. (162, Beardale St., Hucknath, Notts).

On December 6 a decree was passed in Convocation, in the University, Oxford, on the motion of the Vice-Chancellor, to confer the title of Professor Emeritus on Mr. F. Y. Edgeworth, who held the office of Drummond Professor of Political Economy for thirty years, 1891—1921.

Mr. Henry Clay, M.A., Fellow of New College, Oxford, has been appointed Stanley Jevons Professor of Political Economy and Cobden Lecturer in the University of Manchester. Mr. Clay, in 1912, had charge of the Department of Economics in the University of Leeds during the absence of Professor Macgregor. From 1917 to 1919 he was engaged in administrative work at the Ministry of Labour and at the Ministry of Munitions, where he was responsible for the preparation of several important official reports. He has recently visited and conducted courses of lectures in several universities in Canada and the United States.

Mr. Ephraim Lipson, M.A. of New College, has been appointed Reader in Economic History at the University of Oxford. Mr. Lipson is the author of *Economic History of England in the Middle Ages*, reviewed in the ECONOMIC JOURNAL, 1915; and of *Increased Production*, noticed in the ECONOMIC JOURNAL, 1921, p. 425.

Mr. Walter T. Layton, C.H., C.B.E., has been appointed editor of the *Economist*, and took up his duties in January.

Students of the classical political economy will rejoice to learn that the long-missing and much-desired manuscript of David Ricardo's *Notes on Malthus* has been recovered, and that through the courtesy of Mr. Frank Ricardo—a great-grandson of the economist—this work is about to be made accessible in a convenient reprint. Written in the autumn of 1820 as a commentary upon Malthus' *Principles of Political Economy*, the "Notes" were designed as an appendix to the third edition of his own *Principles*, then preparing. But James Mill's advice that Ricardo should avoid giving his treatise too controversial a character prevailed. The manuscript after having been read by Mill, Malthus, McCulloch and Trower, was withheld from publication, and the commentary, tantalising references to which are present in Ricardo's correspondence and in McCulloch's prefatory memoir to the *Works*, has remained an important desideratum in the study of the Ricardian economics. The "Notes" consist of 412 folios, estimated by Ricardo as likely to "occupy about 150 pages if printed." The whole will be issued, with convenient apparatus, during the coming year by The Johns Hopkins Press, under the editorial care of Professor J. H. Hollander, of the Johns Hopkins University, and Dr. T. E. Gregory, of the London School of Economics.

The scattered minor writings of the late Professor Böhm Bawerk have been brought together and edited by a former student, under the direction of his wife. Their appearance has been delayed by the distresses in Vienna, but the publication is now announced.

The Decennial Index of the JOURNAL, for the years 1911–1920, which has been prepared by Miss Naomi Bentwich, is being circulated to Fellows without charge. Others can obtain copies from the Assistant Secretary at a price of 5*s*.

RECENT PERIODICALS AND NEW BOOKS

Economica (London School of Economics).

MAY, 1921. *Earners and Dependants in English Towns.* PROF. A. L. BOWLEY. The composition of ordinary families is ascertained by the method of sampling from observations on a population of near 2,000,000. The average working-class family consists of 4·2 persons; of whom 2·3 are dependent. Closer analysis shows that the case supposed to be typical a man unaided supporting a wife and three children—occurs only in 5 per cent. of households. Households with no dependent children under fourteen years number 40 per cent. *The Survival of Small Firms.* PROF. A. L. BOWLEY. Of firms in London over 97 per cent. employ fewer than 100 persons; more than half the firms employ less than 20 persons. *Foundations of Industrial Welfare.* MISS E. T. KELLY and MISS M. L. HASKINS. On "Welfare Work" as promoting the spirit of co-operation. *Measurement of the Balance of Trade.* C. K. HOBSON. A careful estimate of the balance of indebtedness between residents in the United Kingdom and residents abroad. If we subtract the excess of (visible) imports (*plus* "invisible imports," such as expenditure by British tourists abroad) from the total of invisible exports, the remainder, representing export of capital, is much the same in 1920 as in 1913, about £180,000,000. *Marx and Marxists.* P. FORD. A survey of the differences between the schools of Marxism as to historical necessity, social catastrophe and other dogmas. *The Trade Depression following the Napoleonic Wars.* MISS M. C. BUER. An historic parallel warning us against both heraldings of false dawn, and too profound pessimism. *The Limitation of the Liability of Shipowners.* H. C. GUTTERIDGE. Referring to the 1921 Report [Cd. 1205].

OCTOBER, 1921. *Changes in the Standard of Living in the United Kingdom,* 1860–1914. MISS W. A. MACKENZIE. The standard of living as measured by the caloric value of food consumed increased considerably during the period; while the proportion of income expended on nourishment diminished. *Economic Incentive.* D. H. ROBERTSON. A study on Supply and Demand; pointing to the conclusion that the rich would stand more pressure "without giving up in disgust the job of being rich," and that too much importance is attached to incentives. *Commodity Maps.* LL. R. JONES. *Industrial and Commercial Libraries of the Future.* B. M. HEADICAR. *The Indian Currency Report of December,* 1919—*and After.* A. R. BURNS. *Siberia in* 1919. A. F. SPENCER. *Co-operation in Russia.* MARGARET S. MILLER.

JANUARY, 1922. *International Relations and International Law.* PROF. P. HIGGINS. *The Law relating to Bills of Lading.* PROF. H. C. GUTTERIDGE. *A Classified List of Agrarian Surveys.* HUBERT HALL. *Administrative and Clerical Staffs in the Local Government Service.* MRS. H. MARTYN. *The Ball Warpers.* J. W. F. ROWE. The unions, maintaining wages at an artificial height, perhaps hastened the introduction of machinery, yet their policy may have been beneficial to labour. *Studies in Probability.* With special reference to Mr. Keynes' work, PROF. A. WOLF restates the Principles of Probabilities, and PROF. A. L. BOWLEY defends the practice of Statisticians—especially with respect to *Sampling.*

Edinburgh Review.

JANUARY, 1922. *The Foreign Exchanges.* The disorganisation of the exchanges is mainly due to the dislocation of trade money and personal expenditure, and to the prospect of having to pay huge external debts. The main remedy is increased production. *Standards of Production in Agriculture.* ARTHUR W. ASHBY. An examination of different standards used for measuring production—yield per man, per acre, per unit of capital, etc.—promises the means of estimating the best quantitative combination of the factors of production on land of known character for given systems of farming. *Politics and Unemployment.* THE EDITOR. The debasement of money which might have been prevented by levying an additional £250,000,000 during the war, the claim for higher wages than the consumer can afford, subsidies to strikers, the absurdities of the Safeguarding of Industries Act, doles discouraging work and saving—such are the causes of present unemployment.

Contemporary Review.

NOVEMBER, 1921. *The Story of the Trade Board Acts.* GERTRUDE M. TUCKWELL. The Acts have worked well and ought not to be scrapped hastily.

DECEMBER. *Unemployment.* A. C. PIGOU. After an analysis of general causes, there are assigned as special causes of the present unemployment the dislocation attending the war and the boom of 1919–20. Confidence, the mainspring of industrial activity, has been shattered. *The Key Industries Act in Working.* CAPTAIN WEDGWOOD BENN, D.S.O., M.P. The Safeguarding of Industries Act causes delays, disputes, and an expensive staff; taxes food, *e.g.* an ingredient of infant food dutiable as "fine chemicals," penalises our allies the French through the virtual bounty given to the German exporter, hinders research by taxing scientific instruments and medical chemicals, discriminates unfairly by taxing materials but not the finished products, *e.g.* fire extinguishers. *Mr. Lansing and the League.* J. R. M. BUTLER. *Versus* Mr. Lansing's "personal narrative," it is argued that Lord Robert Cecil's plan was not undemocratic, did not consecrate the balance of power in a bad sense, was not comparable with the Holy Alliance of 1815.

Fortnightly Review.

NOVEMBER, 1921. *Prices and Productivity.* H. H. O'FARRELL. Falling prices are consistent with increased production. Devaluation would be a breach of faith, of the promise to convert Currency Notes into standard sovereigns. *Labour in War and Peace.* G. D. H. COLE. The pre-war movements described by the writer in 1913 stopped suddenly in the autumn of 1914. But the necessity of safeguarding labour under the novel circumstance of war led to a great increase of Trade Union membership, from two and a half millions in 1910 to nearly four millions in 1914. But the new members proved apathetic in the struggles which are traced down to "Black Friday" in April 1921. Some encouragement is afforded by the Building Guild movement and the spread of education.

Better Business (Dublin).

NOVEMBER, 1921. *Co-operative Organisation in India.* R. B. EWBANK. *Lessons from the Economic Crisis.* P. REDFERN. *Irish Co-operative Clothing Manufacturing Society.* P. J. TUOHY. *Improvement of Irish Dairy Herds.* H. DE COURCY. *Co-operation in Roumania.* DIARMID COFFEY.

Indian Journal of Economics (Allahabad).

Vol. III, Part 4. This "Conference Number" contains papers read and discussed at the Fourth Annual Conference of the Indian Economic Association, on Indian Public Finance, Labour Problems, Famine and Export, Currency and Exchange. Relating to the first subject, among other papers is one by PROF. JEVONS on *Indian States and Sea Customs.* Whereas the States now suffer by, but have no share in, the Customs revenue, schemes for giving them a share are recommended on the ground that the incidence of Customs duties should fall on the Government, which realises and benefits by those duties. There are papers on *A Subsistence Wage, Labour Unrest, Improvement of the Conditions of Indian Labour,* and *Suggestions for Labour Legislation.* PROF. GILBERT SLATER argues against the prohibition of export of food grains as a preventive against famine. B. F. MADON severely criticises the Report of the Currency Committee.

International Labour Review (Geneva).

NOVEMBER, 1921. *The Congress of the International Co-operative Alliance.* PROF. CHARLES GIDE. Among the subjects of resolutions were the admission of Russian delegates (carried), the relations of Co-operation to Trade Unions, to Commercial Policy and to War. On the last question Prof. Gide argued that no economic transformation could be expected to result in the abolition of war caused by passions rather than interests; and secured a carefully worded resolution in favour of peace through co-operation. *The Co-operative Movement of Great Britain and its Recent Developments.* MRS. SIDNEY WEBB. An anticipation of the *Consumers' Co-operative Movement* reviewed above.

DECEMBER. *Prevention and Compensation of Unemployment.* SEEBOHM ROWNTREE. The normal problem rather than the present crisis is considered. *Unemployment within Employment.* MORRIS L. COOKE. The unemployment considered is that by which the employment given to employees falls short of the theoretical maximum.

JANUARY, 1922. *India and the Washington Conference.* SIR C. ERNEST LOW. The Co-operative Movement in Italy. MENCCIO RUINI.

Quarterly Journal of Economics (Cambridge, Mass.).

NOVEMBER, 1921. *The Origin of the Eight-Year Generating Cycle.* H. L. MOORE. *The Railroads under Government Operation.* From January 1, 1919, to March 1, 1920. W. J. CUNNINGHAM The results of federal control during this period were not so favourable as those in the preceding time of war (reviewed February, 1921). They afford no argument in favour of a permanent policy of public ownership and management. *The Technological Interpretation of History.* A. H. HANSEN. The limitations of the Marxian theory are exposed. *A Statistical Test of the Success of Consolidations.* A. S. DEWING. Failure rather than success is evidenced. *The Domestic and Foreign Wool Manufacturers and the Tariff.* ARTHUR H. COLE.

The American Economic Review (Chicago).

DECEMBER, 1921. *Failure of the Merchant Marine Act of 1920.* E. S. GREGG. *Cycles of Strikes.* A. H. HANSEN. *The Cost of Living in France.* F. H. BIRD. *Economic Basis for Business Regulations.* R. C. TUGWELL.

Journal of Political Economy (Chicago).

NOVEMBER, 1921. *Corporation Training Schools for College Men.* W. A. RAWLES. *Schools and Corporation Training Courses.* J. T. MADDEN and others. *The Corporation School.* L. S. LYON. *Reforms in Food Distributions.* W. R. CAMP. *The Quantity Theory Scrutinised.* H. BILGRAM.

Journal des Économistes (Paris).

NOVEMBER, 1921. *Les Déviations éthico-sociales et la Science économique* YVES-GUYOT. *Un impôt sur le Revenu sous la Révolution.* G. DE NOUVION.

DECEMBER. *Le budget de 1922.* YVES-GUYOT. *Le chaos monétaire.* A. RAFFALOVICH.

JANUARY, 1922. *Quelques problèmes de 1922.* YVES-GUYOT. *Le Marché financier en 1921.* ARTHUR RAFFALOVICH.

Revue d'Économie Politique (Paris)

Stores" offer some of the advantages of Co-operative Societies. *La Question du Change au Congrès postal de Madrid.* B. NOGARO. *Une enquête régionale sur le coût de la Vie.* E. ANTONELLI.

NOVEMBER–DECEMBER. *La question des réparations depuis la paix. La participation aux bénéfices à la gestion.* P. PIC. Referring to recent legislation relating to the share of work-people in the profits and control of business. *Quelques définitions de l'épargne.* CHARLES RIST. A contribution to the theory of Capitalisation.

L'Économiste Français (Paris).

In recent numbers M. ÉDOUARD PAYEN has resumed his statistical studies on the production and consumption of commodities in common use. Of *tea,* for instance (November 19, 1921), the United Kingdom consumed 1441 quintals (317,600,000 lbs.), some seventy times more than France. The demand for tea, as for *coffee* (November 12), was urgent in the first years of the war. The demobilised soldier does not consume as much as when he was under arms. The world's crop of coffee in 1920 was about 16,700,000 sacks; of which Brazil furnished 11,750,000—a smaller proportion than usual. The uses of *aluminium* (December 3)—from aeroplanes to cooking utensils—continue to multiply. The United States in 1913 produced above 35 per cent. of the world's supply; France came second with 21 per cent. Germany is rich in *magnesium,* a metal which is advantageously combined with aluminium (December 3).

Another useful series beginning DECEMBER 31 gives the population, extent of territory and other particulars relating to the new States created by the Treaty of Versailles.

In the issue of DECEMBER 3 Prof. A. Andréadès describes the centenary celebration which the London Political Economy Club held last November: and pays a just tribute to Mr. Henry Higgs's history of the club (reviewed in the ECONOMIC JOURNAL, December, 1921).

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

DECEMBER, 1921. *Die Kriegsunternehmung.* PROF. W. F. BRUCK. *Handelsbilanz, Zahlungsbilanz, Valuta-Guterpreise.* DR. ALBERT HAHN. A discussion of the monetary situation. *Die Sozialpolitik im neuen Oesterreich.* PROF. KARL PRIBRANS. *Die Soziale Krise in Oesterreich.* PROF. E. LEDERER. *Die organization der Arbeitslosen für sorge in Oesterreich.* DR. KARL FORCHHEIMER.

Giornale degli Economisti (Rome).

OCTOBER, 1921. *Un progetto Monetario.* G. DE VECCHIO. Prof. Irving Fisher's scheme for stabilising money is unfavourably criticised. *L'aumento dei Salari dal 1914 al 1921.* G. MADIA. The mean wage in Italy in 1914 was on an average of provinces 3·53 lire, on an average of industries 3·71 lire.

NOVEMBER. *Nuovi contributi allo studio della distribuzione dei redditi.* FELICE VINCI. The discrepancy between Pareto's law for the distribution of incomes and the normal frequency-curve is accounted for by Cantelli's hypothesis that the medley of fortuitous causes is subject to a certain condition, namely, that

the aggregate, or average, of ophelimity (satisfaction) is given (cp. *Metron*, April, 1921). *Il protezionismo marittimo in Italia.* E. CORBINO. *L'aumento dei Salari dal* 1914 *al* 1921. G. MADIA. The mean (nominal) wage in 1921 was 21·21; 5·7 times higher than in 1914. But account being taken of the rise in prices the *real* wage was not quite equal to what it was in 1914; it was in 1917–18 only half the 1914 real wage.

DECEMBER, 1921. *Sull'estensione del Teorema del Tchebycheff.* F. VINCI. The extension of Tchebycheff's theorem (as to which see Keynes' *Probability*), given by Prof. Karl Pearson in Biometrika, 1919, is said to have been anticipated by Italian statisticians. *Il Mercato e la Crisi del Salnitro.* A. CARNELUTTI. On the nitrate of soda business in Chili. *Il Protezionismo Maritimo in Italia.* E. CORBINO.

Scientia (Milan).

1, II, 1922. *Les causes du chaos actuel.* B. RUSSELL. The dominant forces are Industrialism and Nationalism; the former comprising Capitalism and Communism, the latter Imperialism and "Self-Determination." Behind is Science, through deficiency of which and its incidents—surplus of food, machinery, technical skill—communism will have an affinity to capitalism; compulsion of the work-people, as in Russia, will ensue. Likewise there is an affinity between the divisions of Nationalism. The Poles were no sooner set free than they began a war of conquest. The restraint of Nationalism appears to the writer even more important than economic improvement. Socialism and a strong international Government may prevent the return to barbarism.

La Riforma Sociale (Turin).

OCTOBER, NOVEMBER, DECEMBER, 1921. *Riforme discussioni e proportia in Materia d'imporla sulle Successioni.* MARIO ROTONDI. Reforms of duties on inheritance are discussed; with special reference to Italian legislation and economic literature. *Il pensiero di Saint-Simon Considerato dopo un Secolo.* BERNARDO MOSCA.

Revista Nacional de Economia (Madrid).

No. 31. *La ordenacion bancaria.* E. RUI. *El supuesto enriquecimento de España.* J. NART RODÉS. A great increase in national wealth is not proved by the acquisition of gold. *Las herencias en España.* ANDRÉS BARTHE. On inheritance taxes in Spain.

De Economist (La Hague).

Robinson als Rentetrekker. Dr. H. W. C. BORDEWIJK. Whether Robinson Crusoe could be called a receiver of rent is discussed, with frequent reference to Sax, as a question of more than theoretical interest. *Het internationaal verkeer in en onder dem Volkenbond.* C. J. VAN DER MANDERE. The relations of the League of Nations to international trade.

Ekonomisk Tidskrift (Uppsala and Stockholm).

The principal contents of the numbers received since the last notes (cf. ECONOMIC JOURNAL, September 1921) were prepared are as follows :—

Combined No. 4–5. *The Collapse of the French Assignats.* E. F. HECKSCHER. *The Price Index Number of the Svensk Handelstidning.* G. SILVERSTOLPE. *Carl Menger.* KNUT WICKSELL. *The Restoration of the Monetary Standard.* D. DAVIDSON. *Import Duties and Monopoly.* E. F. HECKSCHER. Report of discussion at the Political Economy Club on "The Exchange Question."

No. 9. *Inflation, Volume of Money and Interest.* G. ÅKERMAN.

Combined No. 10–11. *Inflation, Volume of Money and Interest.* KNUT WICKSELL. *Prices of Agricultural Land in the Torna and Bara Districts (in Scania),* 1914–1920. THURE BJÖRKMAN. *The Place of H. L. Collins in the Development of the Theory of Money in Sweden.* B. OHLIN. Report of discussion at the Political Economy Club on "Business and the tax problem."

No. 12. Economic Studies by various writers in honour of Professor Knut Wicksell's seventieth birthday.

[The usual statistical tables appear in each number and occupy the whole of Nos. 6–8.

Dr. Heckscher's historical sketch of the course of depreciation of the French assignats and their final supersession has especial reference to compensation for losses due to changes in the value of the current money. It is based on studies of various documents, including some which, as he says, were not at the disposal of Mr. Hawtrey when he wrote in the ECONOMIC JOURNAL on the same subject in 1918.

Dr. Silverstolpe, who has been responsible for the preparation of the wholesale prices index issued by the Swedish Journal of Commerce, describes the sources and range of the material used. Quarterly data from 1913 to 1917 inclusive were found available in the records of the Swedish Chamber of Commerce and in official publications, while prices of wood-pulp were found in the journal *Affärsvärlden.* The base period is the year from July 1913 to June 1914, and the weights used represent the estimated consumption in the calender year 1913, with a modification in the case of coal in view of the later reduction in consumption and the effects of overweighting the high prices recorded during the war. From the beginning of 1918 monthly figures have been prepared, largely from price information obtained from business firms, the detail in these cases not being available for publication. The 47 series of prices are divided into 10 groups, the separate index numbers for which are given. A test of the effect of substituting, as weights, the estimated consumption of 1918 is found to affect only to a practically negligible extent the index for December 1918, the highest recorded.

Professor Wicksell's contribution dealing with Karl Menger is an appreciation of the work of that writer, of whose "Grundsätze" he says that its influence on the development of economic theory is greater than that of any other book since Ricardo's *Principles.*

Professor Davidson advocates the general adoption of the gold exchange standard as a means of restoring the gold standard without putting so great a strain on the world's resources in that metal as to bring about an undesirable and unnecessary appreciation of gold, and Professor Heckscher shows how import dutes may favour monopolists, though the illustration by the case in which the quantity of a commodity demanded is assumed to vary simply as the reciprocal of the price is not as convincing as he appears to think.

In the two articles on Inflation, Money and Interest, the relation of Money, Prices and Rate of Interest to the problem of inflation is discussed. Hr. Åkerman contends that it is the occurrence of a rate of

interest lower than that normal to the economic situation which is the stimulus to inflation, and that though a variation in the volume of money may produce the divergence between the actual and normal rates of interest and so affect prices, the divergence may arise independently and become the cause of changes in both prices and volume of money. Professor Wicksell contests the validity of certain features in the case presented, and the appropriateness of the statistical data adduced in support thereof.

Hr. Björkman cites the records of sales of land in certain districts in Southern Sweden which he has investigated against the view that the war has resulted in special advantage to landowners in the appreciation of their property, and shows smaller increases in the sale-prices of land than in those of agricultural products, so far as the data examined go.

The note on H. L. Collins deals with an omission in an earlier survey of Swedish literature on the Quantity Theory of Money. The concluding sentence is of interest with reference to broader questions, the view being expressed that "a large part of the supposed advance in monetary theory during the world war—as one example, the theory of the purchasing power parity—is nothing else than a resuscitation of this kind" (*i.e.* of earlier doctrines).

The meetings of the Swedish Political Economy Club reported in these numbers have discussed the restoration of stable international exchanges and the effects on business expansion of the high rates of taxation brought about as a result of the war, which, it may be observed, are by no means confined to belligerent countries, or the discussion would have possessed a very different kind of interest to those who took part in it. A. W. F.]

NEW BOOKS.

English.

Borchardt (Julian). The People? Marx. Abridged popular edition of "Capital." Edited by Borchardt. Translated by S. T. Nash. London: International Bookshops. Pp. vii + 286. 2*s*. 6*d*.

Briggs (M.). A text-book of Economics. London: Clive. 1921. Pp. 527.

Brunton (John). Bankers and Borrowers. With an Introduction by Ernest Sykes. London: Arnold. Pp. viii + 128. 7*s*. 6*d*.

Cassel (Gustav). The World's Monetary Problems. London: Constable & Co. 1921. Pp. 154.

[Two memoranda: one written for the International Financial Conference in Brussels and published in Vol. V of the Proceedings of the Conference; the other written for the September Meeting of the League of 1921, and not before published.]

Dane (Edmund). The History and Adventures of a Penny. London: Mills and Boon. Pp. 126. 2*s*. 6*d*.

Ex.-M.P. The Fight for Socialism: a Review of Present Prices and Forecast of Victory. London: Longmans. 1922. Pp. 40.

[The writer describes himself on the title-page as "an Unrepresented Socialist after the War of 1914–18 and the post-war struggles of 1919–20."]

Fraser (Sir Drummond). International Credits (The ter Meulen Bond Scheme). London: Harrisons.

Hare (Sir Lancelot). A Study of Exchange direct and through the Medium of Currency. London: King. 1921. Pp. 84. 2*s*. 6*d*.

HAWTREY (R. G.). The Exchequer and the Control of Expenditure. Oxford: Humphrey Milford. Pp. 72., sm. 8vo. 2*s*. 6*d*.

[A description of the Exchequer and its functions, with a condensed account of the methods of control of public expenditure. One of the series of booklets in *The World of To-day*.]

HAZELL (W. H. H.). Costing for Manufacturers. With a Foreword by the Rt. Hon. Lord Leverhulme. London: Nisbet. Pp. 161. 12*s*. 6*d*.

HEATON (H.). Modern Economic History. With special reference to Australia. Adelaide: Workers' Educational Association. 1921. Pp. 288.

HENDERSON (HUBERT D.). The Cotton Control Board. Oxford: Clarendon Press. 1922. Pp. 74.

ISAAC (CHARLES P.). The Menace of Money Power. London: Cape. 1921. Pp. 294.

[To be reviewed.]

KEATINGE (G.) Agricultural Progress in Western India. London: Longmans. 1921. Pp. 253.

KEYNES (J. M.). A Revision of the Treaty: being a sequel to The Economic Consequences of the Peace. London: Macmillan. 1922. Pp. 223.

[Reviewed above.]

LEVER (E. A.). A Primer of Taxation: an introduction to Public Finance. London: King. 1922. Pp. 107.

MUKERJEE (RADHAKAMAL). Principles of Comparative Economics. With a Preface by Raphael-Georges Lévy. Vol. I. London: P. S. King. 1921. Pp. 336.

PAGAR (SHANKAR MADHAR). The Indian Income Tax: its History, Theory and Practice. Pp. 213.

[After an account of the history of direct taxation in India, the provisions and actual working of Income Tax legislation are explained. The exemption of pensions paid in England which are chargeable on Indian revenues, of interest on sterling loans, and of the profits of steamship companies engaged in the Indian trade, but registered in Great Britain, is criticised.]

PRATT (E. A.). British Railways and the Great War. London: Selwyn and Blount. 1921. (In 10 parts; 3*s*. 6*d*. each.)

PRICE (E. L.). Indian Legislative Economics, or Town *versus* Country. Second edition. London: P. S. King. 1921. Pp. 206.

[A summary and selections from official debates on economic subjects in the Council of State and Indian Legislative Assembly, 1921.]

RADFORD (GEORGE). Labour and the Moneyed Man. London: Hodder & Stoughton. 6*s*.

ROBERTSON (D. H.). Money. (Cambridge Economic Handbooks.) London: Nisbet. Pp. 178.

SOUTHERNS (L.). Physical Economics: an Essay on Fundamental Principles. London: Labour Publishing Co. 1921. Pp. 67. 2*s*. 6*d*.

SUTCLIFFE (J. T.). A History of Trade Unionism in Australia. Melbourne: Macmillan. 1921. Pp. 194.

TURNOR (CHRISTOVER). The Land and its Problems. London: Methuen. 1921. Pp. 254.

[This is one of the series edited by Dr. Armitage Smith purporting to deal with the fundamental principles of Political Economy simply and concisely.]

WEBB (SIDNEY and BEATRICE). The Consumers' Co-operative Movement. London: Longmans. 1921. Pp. 504.

[Reviewed above.]

WENDEL (H. M.). The Evolution of Industrial Freedom in Prussia, 1845–1849. New York: University Press. 1921. Pp. 114.

WHITE (BENJAMIN). The Currency of the Great War. London: Waterlow. 1921. Pp. 104.

[Well described and beautifully illustrated specimens of emergency currency, British, Allied, neutral and enemy. The arrogance of the design on some enemy notes, *e.g.* the German Michael cutting off the heads of a dragon (the Allied nations), evokes the indignation of the compiler.]

American.

ABBOT (W. LEWIS). Competition and Combination in the Wholesale Grocery Trade in Philadelphia. (A thesis for the degree of Doctor of Philosophy.)

ANDREWS (I. O.) and HOBBS (M. A.). Economic Effects of the World War upon Women and Children in Great Britain. (Carnegie Endowment for International Peace.) Second revised edition. New York: Oxford University Press. 1921. Pp. ix + 255. $1.

BRANDT (LILIAN). How Much Shall I Give? New York: Frontier Press. 1921. Pp. 153.

[*A study in philanthropy.*]

EAVES (LUCILE). Old Age Support of Women Teachers. Provisions for old age made by Women teachers in the Public Schools of Massachusetts. (Women's Educational and Industrial Union.) Boston. 1921. Pp. 122.

FEIS (*HERBERT*). The Settlement of Wage Disputes. New York: Macmillan Co. 1921. Pp. 289.

FRIEDMAN (ELISHA M.). International Finance and its Reorganisation. New York: Dutton. Pp. 702.

HAMMOND (J. HAYS) and JENKS (JEREMIAH W.). Great American Issues: Political, Social, Economic. New York: Scribner's Sons. 1921. Pp. 258.

HAZARD (BLANCHE E.). The Organisation of the Boot and Shoe Industry in Massachusetts before 1875. Cambridge, Mass.: Harvard University Press. 1921. Pp. 293.

[The authoress is Professor of Home Economics in Cornell University.]

JOHNSON (EMORY A.) and THURMAN (W. VAN METRE). Principles of Railroad Transportation. (Appleton's Railway Series.) New York: Appleton. Pp. xix + 617. 18*s*.

KNIGHT (CHARLES KELLEY). History of Life Insurance in the United States to 1870. (A thesis for the degree of Doctor in Philosophy.) Philadelphia: University of Pennsylvania. 1920. Pp. 160.

LAGERQUIST (WALTER E.). Investment Analysis: Fundamentals in the Analysis of Investment Securities. New York: Macmillan Co. 1918. Pp. 792.

RATHENAU (W.). The New Society. New York: Harcourt. 1921. Pp. vi + 147.

[By the well-known German Minister. The manual labourer should be freed from monotony; he should have some intellectual work, and the brain-worker some manual labour.

SELIGMAN (Edwin R. A.). Essays in Taxation. Ninth Edition, completely revised and enlarged. New York: Macmillan Co. 1921. Pp. 806.

[Five new chapters have been added, three of them relating to war finance.]

TANNENBAUM (F.). The Labour Movement. New York: G. P. Putnam's Sons. 1921. Pp. 259. $2.

[The destruction of capitalism is expected. Among other recipes a uniform wage for all kinds of labour is suggested.]

TAUSSIG (F. W.). Selected Readings on International Trade and Tariff Problems. Compiled by F. W. T. Boston: Ginn. 1921. Pp. 600. $3.

TURNER (J. ROYCE). The Ricardian Rent Theory in Early American Economics. With an Introduction by Frank A. Fetter. New York: University Press. 1921. Pp. 221.

[The author is Professor of Economics in New York University.]

Waste in Industry. Committee on Elimination of Waste in Industry. Washington: Federated American Engineering Societies. 1922. Pp. 409.

French.

ANDRÉADÈS (A.). La vénalité des offices est elle d'origine Byzantine. Paris: Sirey. 1921. Pp. 16.

[*The conflicting evidence as to the sale of offices under the Byzantine Empire* is discussed by the Athenian Professor with his usual learning and acumen.]

ANDRÉADÈS (A.). Le Montant du Budget de l'empire Byzantin. Paris: Leroux. 1922. Pp. 55.

[An extract from *La revue des Études Grecques*, showing that evidence for the exact determination of the revenues of the Byzantin is not forthcoming.]

BALDY (Edmund). Les Banques d'Affairs en France depuis. 1900. Paris: Pichon. 1922. Pp. 391.

BEKKER (G.). Le Mouvement Copératif en Russie. (Travaux del de Sociologie.) Brussels: Lamertin. 1921. Pp. 175.

BOUNRATIAN. Les crises Economiques. Traduit du Russe par J. Bernard. Paris: Giard. 1922. Pp. 388.

Brenier (Henri). Les dévastations Allemandes en France et les inexactitudes de M. J. M. Keynes. Nancy: Berger-Levrault. 1921. Pp. 8.

[Extract from the *Journal de Société de Statistique* de Paris, June 1921.]

Gennep (Arnold van). Traité, Comparatif des Nationalités. Tome premier. Les élements extérieurs de la Nationalité. Paris: Rayat. 1921. Pp. 228.

Gide (Charles). Premières nations d'économie politique. Paris: Michel. Pp. 185.

Journé (M.). Précis d'économie politique. Paris: Alcan. Pp. 490.

Lachapelle (Georges). La vérité sur notre situation financière. Paris: Roustan. 1921. Pp. 179.

March (Lucien), Moret (J.), Hawtrey (R. G.), Orde (Charles) and others. Problèmes actuels de l'économie. Paris: Colin. 1921. Pp. 477.

[A special number of the *Revue de Métaphysique*.]

Roscher (Wilhelm). Economie industrielle. Vol. II. (Bibliothèque internationale d'économie politique.) Sous la direction de Alfred Bonnet. Paris: Giard. 1921. Pp. 497.

[The eighth edition, revised and augmented. J. W. Streda; translated by M. P. Hallier.]

See (Henri). Esquisse d'une histoire du Régime Agraire en Europe aux XVIII. et XIX. siècles. Paris: Giard. 1921. Pp. 276.

[The author is an honorary Professor at the University of Rennes.]

Simiaud (François). Statistique et Expérience (Bibliothèque des Science économiques et sociales). Paris: Rivière. 1922. Pp. 68.

Zagorsky (Simon). L'évolution actuelle du bolchevisme russe. Préface de M. Émile Vandervelde. Paris: Povolozky. 1921. Pp. 152.

[The Petrograd Professor shows from official documents how the Soviet republic is recanting its absurdities. Bying and selling is permitted, concessions to foreign capitalists are offered, labour may be hired. Agricultural produce is no longer commandeored, only taxed. The former plan, depriving the peasant of motives to production, is largely responsible for the famine.]

German.

Kaemmerer (G. H.). Geld. Eine genetische Studie. Berlin: Puttkammer. 1921. Pp. 48.

Levy (Dr. Hermann). Die Englische Wirtschaft. Leipzig: 1922. Pp. 153.

Repka (Wilhelm). Die Sozialisierung des Reiches. Hamburg: Unionverlag. 1921. Pp. 100.

Schwiedland (E.). Geld und Wahrung. Wien. 1921. Pp. 29. 20 kronen.

Italian.

BERNARDINO (A.). Socialismo e finanza. Palermo: Trimarelis.

FLORA (FEDERICO). Manuele della Scienza delle Finanze. Sesta edizione riveduta ed ampliata. Livorno: Raffaello Giusti. Pp. 937. 8vo.

[The well-known treatise on Public Finance by the Professor of the University of Bologna has been revised and augmented in this sixth edition. The additional facts and figures do not modify the opinions expressed in the fifth edition, which appeared in 1916.]

GRAZIANI (A.). Ricardo et J. S. Mill. Bari: Latera.

GRILLI (CARLO). Il Protezionismo dopo la Guerre. Rome: Coop Tipographia. 1921. Pp. 96.

LER-SPANO (G. M.). La questione Sarda. Con prefazione di L. Einaudi. Turin: Bocca.

MONDAINI (G.). L'assetto coloniale del mondo dopo la guerra. Bologna: Cappellri.

MORTARA (G.) Prospettive Economiche, 1922. Città di Castello: Società Tipografica. 1922. Pp. 384.

[Estimates with respect to the future of several industries: grain, wine, olive oil, etc. For labour (in Italy) there is predicted abundant offer, moderate demand, reduction of wages, better work.]

THE ECONOMIC JOURNAL

JUNE, 1922

COMMUNICATION COSTS AND THEIR INTERDEPENDENCE

VARIOUS causes have in the last few years combined to awaken public opinion to the importance of communications. The Great War was unlike all previous wars. The old wars were fought by a few score thousand men who marched short distances on their own legs and supported themselves mainly from the resources of the immediate neighbourhood. In the Great War modern transport moved millions of men over thousands of miles, fed them from the wheat-fields of Alberta and Argentina, munitioned them from the factories of the United States, and clothed them from the sheep-runs of Australia and New Zealand. The stay-at-home population of this country was forced to contemplate what it would mean if German submarines interrupted the communications of our mercantile fleet, and what it did mean when we failed to interrupt the communications of German air-ships and airplanes. And it has not been the War only which has taught us our lesson. Some fifteen years ago the growth of motor transport seemed startling in its suddenness. Since then the growth of transport by air has been even more startlingly sudden. And at this moment the development of wireless communication not only by telegraph but by telephone looks as if it might be more startling still. Moreover, the importance of communications has touched us, not only from the practical and scientific side, for as taxpayers we in Great Britain have had to pay in the last four years nearly £200,000,000 to keep our railways going; we are spending many millions a year on air services, only to be told by the experts that our parsimony is endangering the existence of the Empire; while as ratepayers we find that the cost of road maintenance in England has much

more than doubled in less than ten years, having increased from £19,000,000 to about £50,000,000 per annum.[1]

The increased attention paid to communication has had various reactions. Public opinion is beginning to understand that, though different means of communication may be employed in differing circumstances, the problem of transport is a single problem. And in pursuance of this idea, a Ministry of Transport has been established in Great Britain. Germany has gone further and, overriding the particularism of the various States, has established an imperial Ministry of Communications (*Reichsverkehrministerium*). Two different Committees have recommended the establishment of a similar Ministry of Communications (taking over the control of Posts, Telegraphs and Telephones) in India. Further, not only in Great Britain, but in France and Germany, the United States and Canada, not to mention smaller countries such as Holland, new organic laws have been passed profoundly modifying the whole status of railways, whether publicly or privately owned, and their relations to the State on the one hand, and to their customers on the other.

But though a good deal has been done to cope with the insistent needs of the moment, the wider problem of interrelation between various modes of communication under the new conditions has not yet received the attention which it deserves, and which must be given to it ere long. We thought, for instance, till the other day that roads and railways were complementary. They are now proving to be keen rivals. Subsidies are being given to air service and wireless telegraphy installations. Before long the question of the effect of this subsidised competition on ocean steamship and cable undertakings will have to be faced.

The object of this article is to invite consideration of the economic issues involved. The matter can be looked at from different points of view. We might consider competition between different modes of communication in rendering the same or similar services; or we might dwell upon the respective importance of the public and private interest involved; or, again, we may have regard to the way in which the total cost of each particular mode of communication is made up, and the manner in which the payment of this total cost is apportioned between the public and the individual user. Perhaps the best point of view from which to approach the question is the last.

[1] This increase of cost is no doubt largely due to the rise in wages; but there is good reason to believe that, had the pre-war standard of maintenance been retained, the cost would have been even greater than it is.

Primitive man spent no money on communications. He walked across country with his burden on his back, or ferried over a stream in a hollowed log or a coracle of domestic manufacture. And the original meaning of highway is merely a right of passage over a certain stretch of unenclosed land—such as still exists, for example, on the Berkshire Downs—and not a made road at all. But all modern communications imply three separate or at least separable costs; there is the capital cost of construction and improvements; the recurring cost of maintenance; and thirdly, the cost of use. In the long-civilised countries of Western Europe, the construction cost has in the main been spread over many centuries, and charged as incurred against current national, or more usually local, revenues, whether in the form of money or of obligations on adjacent owners or occupiers to supply without payment labour, horses and carts, or materials. The cost of railway construction, on the other hand, is almost always met by capital borrowed or subscribed in the expectation of a return—immediate or postponed—in interest or dividends. Not always so, however. New roads, as, for instance, the Thames Embankment or Kingsway, may be made with borrowed money, while the railways of the Malay States have been mainly constructed out of current revenue. Whichever course be adopted, there equally exists a capital cost which has to be met somehow. There is also the recurring charge for maintenance, which cannot be exactly assessed against each individual user. On a road it is normally borne by the community. On English railways it is charged against the users as a whole, with no, or at most a very rough, attempt to apportion it according to the amount of the use. The user of a road is normally left to pay directly the whole expense of his use, including the provision and maintenance of the vehicle, or portion of a vehicle, which he employs. But in some cases, as, for instance, workmen's fares on tramways, some portion of the cost of actual use is borne by the community.

The existence of these three separate costs is obscured by the fact that in practice the charges corresponding to them are seldom or never separated. But there is no difficulty in imagining a case in which they might be. A road authority might keep an account of the capital invested in new construction and improvement, charging the interest on the local rate; might employ a contractor who would maintain the road, and recoup himself by levying tolls; and might leave the users of the roads as at present to meet their own movement costs. In actual practice a road authority normally has no capital account. The cost of widen-

ings and improvements—which is really expenditure on capital account—is charged to revenue equally with the cost of current maintenance.

In the financial statements of a railway company, on the other hand, the three charges are clearly separated. The cost of moving the traffic—the Americans call it "conducting transportation"—is shown in one table; there is another table giving the cost of keeping the rolling-stock in repair, which logically is a sub-head of traffic movement, though in practice it is treated as a separate heading; the cost of maintenance of the road is given in a third table; while the net receipts, after these charges have been paid, represent the cost of capital. But the passenger who buys a ticket, or the trader who forwards a consignment, makes a single payment, and is quite unaware of and uninterested in its subsequent allocation. The same thing is true in respect to means of communication of a different order. A Water Board exists to connect the rain falling in an upland valley with the taps many miles off in an urban bathroom. The water rights are acquired, the channels in the catchment area cut, the reservoirs built, the mains and pipes laid, and the pumps installed at the cost of capital; the undertaking is maintained out of revenue; and then there is the further cost of pumping, distribution and control of actual use. Gas or electricity companies are broadly in a similar position, the only difference, from a communication point of view, between them and a Water Board lying in the fact that they produce the commodity which they supply before they distribute it. Telegraph and telephone organisations, again, have to meet the same three separate costs, the provision of the plant, its maintenance, and the cost of actual use. Capital charges, maintenance charges and working or "operating" expenses are the terms most commonly used for the three respective costs.

In all these cases, where the three separate services are in the hands of a single organisation, the three costs are separate in the accounts but charged as a lump sum against the user. But when we consider communication by sea, we find again that, as in the case of a highway, the use is separate from the provision and maintenance of the road. For ships the main expense belongs to use; the road is provided free by nature except at its two ends; and the provision and maintenance of terminal facilities, docks and piers, artificially deepened channels, and of buoys and lighthouses, are a comparatively small portion of the total expense. The shipowner pays the road expenses of his ship in the form of harbour and dock dues, while the ultimate user, the

merchant, pays similar dues on his merchandise direct to the harbour or dock authority, and pays to the shipowner the cost of its carriage. Canals are obviously only water roads; they are provided and maintained by an authority which may or may not charge tolls for their use. The user in most cases makes his own arrangements for carriage.

I have stressed the separateness, or at least separability, of these three costs. It is to be admitted, however, that in some cases the frontier between them is doubtful. The wages of lock-keepers on a canal, for instance, may be regarded either as cost of maintenance of the highway, or as a portion of the cost of use. Or, again, it is difficult to say whether the fixed electric equipment, the cables, posts and feeder wires of an electric tramway belong to the maintenance of the communication or to its use. Further, though the three costs exist in all cases, their proportions vary greatly from one mode of communication to another; from one country to another; and even in the same country, from one period to another. A "tube" railway costs £1,000,000 a mile to construct: out of every penny the passenger pays, a halfpenny is required to meet the capital charge; the dock and harbour dues on a ship bringing wheat from San Francisco to London are only a trifling proportion of the total expense. On the railway from the Zambesi to the copper mines of the Congo, the traffic is so scanty that three-quarters of the total earnings are required to pay the interest on construction capital; on the railways of the United States the earnings are so large that one-fifth of the gross receipts suffice for an adequate return. In Great Britain in 1913, out of £130,000,000 of receipts, capital took £50,000,000, say 38 per cent.; to-day the gross receipts have nearly doubled, the capital has not been appreciably increased, and only 20 per cent. of the gross receipts are now needed to produce a return at the old rate.

At this point the reader may perhaps complain that, if they are never in practice separated, all this argument as to the separability of the three costs which make up total communication costs is merely otiose discussion. The complaint is not justified. No scheme for a new means of communication can be properly judged unless the cumulative effect of all three factors is taken into account. In many schemes—as, for instance, where it is a question on a railway of building an expensive tunnel or incurring heavy operating expenses on a steep gradient—it is a task of great difficulty to balance wisely one factor against the other. But above and beyond this the different costs do not

stand on the same economical footing. It is evident that the existence of a means of communication is a public interest, while normally the benefit of the use accrues merely to the individual user. A man may be bedridden and yet obtain daily benefit from the existence of the road which leads to his house from the nearest railway station, and of the railway that connects the station with London. A Londoner with an artesian well on his own premises would suffer, if the services of the Water Board ceased to function, and typhoid and diphtheria raged round his house. Or, again, a man who habitually uses a private motor-car to get from his house in the West End to his office in the City benefits from the existence of urban railways, not only because he can himself use them as an alternative in case of necessity, but because to his servants and tradesmen, without whom he could not live, and to his clerks and customers, without whom he could not carry on his business, they are an indispensable means of locomotion.

But adequate communications are a public interest in a wider sense. People starved in England in the Middle Ages, they have starved in India in our own times, they are starving in Russia to-day because food cannot reach them for lack of communications. The generous land-grants of the United States Government to the railway companies in the West in the 'sixties and 'seventies have vastly increased the wealth of the Atlantic States, though not one in twenty of their inhabitants may have ever been west of the Alleghanies.

It would also appear, then, logical that some portion at least of the capital cost of providing communications should be at the public charge, because the public at large benefits by their existence. And if it be a proper public charge, an equitable taxing or rating machinery will naturally be the best means of imposing it. That the cost of the individual use should fall upon the user seems almost a matter of course. If the actual cost of the carriage of a passenger or a consignment from A to B be 5*s*., and the passenger or the consignor considers that the service to him is only worth 3*s*., the passenger or the consignment must normally remain uncarried, for the public has only a remote and occasional interest to make up the deficit.

Maintenance cost falls between capital cost and user cost, for maintenance is partly caused by, and partly independent of use. A road may be destroyed by frost or heavy rains as much as by traffic. The rails of a railway are worn out by use; but the sleepers would rot, and the ballast would wash out and waste

away, even if no train ever passed over the line. The life of a gas pipe or a water pipe, on the other hand, is very largely independent of its actual use. Logically, therefore, that portion of maintenance cost which is due to obsolescence may be assimilated to capital cost—should be regarded, that is to say, as potentially a public charge; the portion which is due to use should be assimilated to the cost of the actual use, to be recovered normally from the users as a whole.

Needless to say, charges have never in actual practice been imposed on any such logical basis. We shall see presently the various methods in which in different countries and at different times they have been apportioned. But meanwhile it is worth while to inquire whether any principle of abstract justice can help us to decide what is the precise share of the cost of providing communications which the public ought fairly to pay. It has been suggested that capital is only invested in improvement of communications when it is expected that the capital cost of the improvement will be at least offset by the reduction in user cost. In French provincial towns, for instance, women still fetch water from the public fountain and carry it to the tops of houses. We find in England that the total cost of conveying water is less, if we invest capital in the installation of a pipe. But perhaps the best illustration is the case of the highway. The "King's Highway" was originally, as has already been said, not a stretch of land, but a legal and customary right—"a perpetual right of passage in the sovereign for himself and his subjects over another's land." "The King has nothing," says a very old book quoted by Mr. and Mrs. Webb, "but the passage for himself and his people." The highway was improved. A raised stone causeway was laid down, along which a laden packhorse could travel. Then the causeway was widened, and made practicable for wheeled traffic. And gradually by such improvements the labour of a man carrying, say, 60 lbs. twelve miles a day, was replaced by the labour of a man and a packhorse carrying two cwt. twenty miles; and then, by the addition of a cart, the same labour resulted in the carriage of fifteen instead of two cwt. It would evidently be just in theory to call upon each user of the improved highway to contribute towards the capital cost of the improvement the value of the reduction of his cost of use. The theory goes further, and when, as in the case of a canal or railway, the whole construction is artificial, and even the right of way has to be paid for, justifies imposing upon the users as a whole the entire cost. And on a railway or a canal, to which

traffic only is admitted after what may be called a preliminary settlement with the owners as to terms and conditions, the theory can be given practical application. But the theory cannot be applied to roads for more than one reason. It is too late nowadays to think of charging upon the users of the road the whole construction and improvement cost, not merely because immemorial custom has consecrated a different system, but because of practical difficulties. We had turnpikes, on which the user was supposed to pay total cost, for two centuries. They were abolished, mainly because of the wasteful cost of collection and the intolerable delays of successive toll-gates. But there was another reason why the turnpike policy broke down, namely, that the difficulty of properly apportioning the total burden among the different classes of users resulted in practice in leaving a considerable portion of the burden unborne. There were exemptions, for instance, of farm vehicles using the roads in the immediate neighbourhood of the farm, of vehicles carrying parishioners on Sunday to their usual place of worship, while, on the other hand, stage coaches, presumably because they seemed to have no natural rights in the locality, were taxed at an extra high rate. In the result, coaches, which were still needed on routes not yet served by railways, were prematurely killed, and the turnpike trusts as a rule went bankrupt.

Even if it were admitted that capital cost heretofore incurred should be ignored, and it were accepted that road users should only be asked to pay the £50,000,000 of annual maintenance, it is clear that the working out nowadays of a new scheme of tolls or licences to do even the roughest justice as between the innumerable different classes of users, and taking account of the extreme variations in the amount of their use, would be a task of the utmost difficulty.

There is a further difficulty: a road giving new or improved access to a district will promote development, but will carry scant traffic at the outset. If the initial traffic is to pay for the whole cost, the toll must be very heavy. But policy dictates that pioneers should be encouraged rather than subjected to extra heavy burdens. If, however, there be any special class who derive exceptional and immediate benefit from new communications, it seems just that they should make a special contribution towards the cost. And this is clearly the case where new communications markedly improve the access to land in the condition commonly described as "ripe for development." In such a case the equity of a charge on the owner is obvious. Whether

this charge should take the form of a toll on the road, or a tax or rate levied on the land to be applied for general road purposes, is a question not of principle but of practical convenience.

So far we have been discussing the question on the basis of principles of abstract justice. It is worth while to inquire how far these principles are being applied at present, or have been applied in the past, in different countries in shaping their policy in the matter of communications. A brief review will suffice to show that there have been no guiding principles, and no consistent policy. Take first the earliest and still most important means of communication, roads. Turnpike tolls, according to Webb's *Story of the King's Highway*, are believed to have existed at some time or other in every European country except Sweden and Norway. They existed also to some extent in the Eastern States of America. Everywhere they have been abolished, and the cost of road provision and maintenance has been thrown on taxation, general or special, or on local rates. Only in the case of what in English law is called " exceptional user " is an attempt made to apportion payment to benefit. And this doctrine of exceptional user only applies to the intensive and spasmodic use of a particular stretch of road, as, for instance, by a quarry owner or timber merchant, and not to the business of a general carrier who habitually carries goods in wholesale quantities over hundreds of miles of roads.

Canals are next in historical order. They mainly began as commercial enterprises. They differed from turnpikes, in that a turnpike was in the hands of a public trust, authorised to levy tolls to cover expenses, including interest and sinking fund on debt, but not to make a profit, while a canal was built by a private company, empowered to levy tolls not exceeding a fixed maximum, and to divide among its shareholders the resulting profits, however large. And before the " calamity of railways " fell upon them, canal companies' profits in England were often very large. Gradually, as railways developed, it became evident in one country after another that canals could only continue to exist if they were assimilated to roads, if the Government, that is, assumed the cost of capital and of maintenance, and if the canal user had to pay carriage cost only. It is evident at this moment that England may in this respect have to follow the rest of the world. The ordinary canal can only retain its traffic if it is toll free. One company alone, the Aire and Calder, favoured by the fact that the company is both toll owner and carrier, but much more by exceptional conditions of location and available

traffic, can probably continue to charge tolls and yet retain its trade.

When the railways in their turn began to divert from the canals the traffic that the canals had diverted from the roads, England and the United States led the way; and the continent of Europe was the docile pupil of England. In America there were some feeble and short-lived experiments in State ownership; and the Belgian trunk lines were in the hands of the Government from the beginning. But with these two unimportant exceptions, railways were at the outset private enterprises. Moreover, at a very early period, the theory that the railway company would be—like a canal company—merely a road owner and toll taker, and that private individuals, either directly or through carrier companies, would be the users, broke down for practical reasons. In England, moreover, it was assumed, and correctly assumed, that the advantages of this new means of communication were so great that the public could and would pay tolls and conveyance charges—very soon combined into and confounded in a single rate—sufficient to cover the total cost. The same thing proved true—subject to the fact that the railways in the West originally received subsidies and free grants of land, which, however, bear a very small proportion of the total investment—in the United States of America. But in no other country has the railway system come into existence without substantial State aid, given in the form, sometimes of out-and-out grants or capital subventions, sometimes of guarantees of dividends.

In countries where joint-stock enthusiasm for railway construction slackened or never existed, and the public found themselves constrained to extend or to initiate their railway system, Governments have always proceeded on the theory, which they inherited from the companies, that the user should pay as far as possible the total cost. Indeed some Governments have gone further. Prussia before the War drew—India still draws large net profits from the State railways and applies them to meet ordinary State expenses. And this form of taxation has been defended by Gustav Cohn as economically sound. No Government in subsidising a private company has ever undertaken to hand over the completed undertaking to the company as a free gift, to be responsible for its annual maintenance, and to leave the company to recover from the users the cost only of use. Nor in cases where the Government has retained the operation of the railway in its own hands has the adoption of a policy on these lines ever been so much as suggested. And yet, if it be reason-

able to charge upon the user of a *macadam* road the cost of use only, there seems no *a priori* reason why a similar policy should not be adopted in the case of a *rail*-road. It may of course be said that this might result in inordinate profits to the private concessionaires of the railway; and the answer might have been good till recently. But within the last two years both in Great Britain and in the United States, the only two countries of really private railway enterprise, laws have been passed providing that railway rates shall be so fixed as to yield to the proprietors a reasonable, but no more than a reasonable, return on their invested capital.

The question, therefore, needs an answer in theory: "Why should the user of a railway be expected to pay the total cost of his use, whereas the user of a road is called on to pay movement cost only?" This question is of urgent practical importance at the present moment. The annual cost of road maintenance, as has already been said, has risen in the last few years from £19,000,000 to £50,000,000, and the increase is in large measure due to the fact that the roads are to-day carrying traffic which formerly went by railway. It has been estimated that 6,000,000 tons of traffic were so diverted last year. But they were diverted, not because the total cost of road carriage was less, but because, while the consignor is asked to pay the total cost by railway, he is only required to pay a portion of the cost by road. The railway rate from London to Birmingham is, let us say, 40*s*. per ton for a certain class of article. The road carrier offers to take the traffic for 30*s*.; and the merchant naturally consigns by road. The lorry carries five tons, and takes, let us say, £10 worth of wear (40*s*. per ton of load) out of the road between London and Birmingham.[1] So the actual cost of road carriage is not 30*s*. but 70*s*. per ton, even though nothing has been charged for the original cost of the road provided by the public for the merchant's use.[2]

The anomaly of the present situation is heightened when we remember that recent legislation has, as I have said, provided that, if railway rates are insufficient to yield a reasonable return

[1] The round figure of £10 for road wear is probably an underestimate. A distinguished authority estimates the injury to the road as equal to 3*d*. per ton-mile. A lorry carrying five tons weighs four tons. This would give 2*s*. 3*d*. (3*d*.×9) as the cost per mile to the road authority of the running of the lorry; and this on the 112 miles from London to Birmingham would equal £13.

[2] The conditions affecting motor char-à-bancs are different. Not only do they already pay licence duties about twice as high, but they are used, occasionally and not intensively, by innumerable different persons, presumably in the main ratepayers, who use them for pleasure and not for the sake of extra gain.

to the shareholder, they shall be advanced. We may then arrive before long at a situation where a large portion of all the merchandise traffic of the country is diverted to the roads, because this method, though more costly on the whole, is cheaper to the individual user; and then next year, or the year after, railway rates on coal, which cannot be taken by road, may have to be put up to redress the balance.[1]

A further anomaly may be found in the present position of London communications. The streets and roads in and approaching the centre area of London are already congested; and the volume of traffic steadily increases. Street widenings are enormously expensive, and the cost of them would naturally fall wholly upon the London rate-payers. New urban railways would relieve the congestion and obviate, or at least postpone, the necessity for street widenings. They would cost less and afford means of communication more rapid and more convenient. But, because the railways are in the hands of private enterprise, the suggestion that the ratepayer should pay any part of the cost of construction of new urban railways would probably come as a shock to the average Londoner. And this notwithstanding that in Paris and New York, in both of which cities the urban railways are in the hands of companies, this policy has long been accepted; and notwithstanding the further fact that the fares on the urban railways of London are fixed under statutory authority on a scale limited to that which is no more than adequate to secure a reasonable return on the companies' capital involved—a return which, it may be added, has never yet been as great as would have been obtained had the capitalist, instead of investing in railway shares, advanced his money on loan to the public authorities.

The confusion of thought as to the real—as distinct from apparent—cost of a particular mode of communication is nowhere better exemplified than in the case of inland waterways. Two striking examples come from recent American history. The Government of the United States has for many years past spent very large sums of the taxpayers' money on the improvement of the navigable channel of the Mississippi river. In spite of this expenditure, the traffic steadily declined almost to vanishing point. During the War, mainly to relieve the overburdened railways, the Government built and operated a fleet of up-to-date tugs and barges, and, with some help from local municipalities,

[1] It should in fairness be noted that commercial motor vehicles do at present pay licence duties amounting to £2,800,000, say one-eighteenth of the expenditure on road maintenance and improvement.

greatly improved the wharves and landing-stages. An official publication of the Inland and Coastwise Waterways Section of the War Office, which now carries on this Government barge service, has recently reported as "a gratifying result" "a net profit for the months of April, May and June [1921], amounting to $22,886." The Report fails to say that this gratifying "net profit" is merely a surplus of gross receipts above actual operating expenses. The facts that no interest is paid on the very large capital sunk not merely in permanent river improvements but in the purchase of the boats, that nothing is debited for current maintenance of the channel, that the United States Government pays no taxes and carries its own insurance on its property, are all left unmentioned. For the fiscal year ending June 30, 1921, this service, of which the taxpayers of the United States paid the great bulk of the cost, attracted a total traffic of nearly 250,000 tons, a negligible fraction of the tonnage carried by the railways running alongside the river at rates calculated to cover not mere movement but total costs.

The famous Erie Canal has been toll free for forty years. Recently the State of New York has spent about $160,000,000 in improvements which amount to practical reconstruction of the main canal and its feeders. The canal is now capable of accommodating boats with a capacity of 3000 tons. In the year 1920 the total traffic passing over it was under 1,500,000 tons. It included 4,000,000 bushels of grain, "about 2·84 per cent. of all the grain received by the Port of New York," the rest being still carried by the railways at a rate only fractionally higher. Clearly, if the canal traffic had, like the railway traffic, to bear the capital and maintenance cost, and not merely conveyance charges, the canal rate would need to be far higher than the railway rate. And yet the newspapers in the State of New York and their readers are convinced, equally with those of the Mississippi Valley, of the superior economy of water carriage.

If we turn to the means of communication under the control of the Post Office, we find again the same absence of guiding principles as in the case of communication by road and railway and canal. The Postmaster-General tells us that the Post Office must be "self-supporting." Apparently he regards the statement as an axiom, for he gives no reasons. That the maintenance of the various forms of communication controlled by the Post Office is a public interest, will not be questioned. Adequate postal service, say in Sutherlandshire, ought no doubt to be given. It can hardly be expected to be self-supporting. On

what ground is the loss to be charged on the users of the London local service rather than on the public at large? And yet, further, what reason is there, beyond the fact that the Postmaster-General controls all three services, why the users of the postal service proper should be required to meet the deficits on the telegraphs and the telephones? Would the Postmaster-General's principle carry him one stage further, and, if the functions of the Minister of Transport were transferred to the Post Office, as the Chancellor of the Exchequer recently suggested, entitle him to call upon the postal revenue to meet any portion of the pledged contributions to road maintenance which the motor licences fail to cover?

The Postmaster-General's dictum is not accepted as an axiom in other countries. The United States Budget for the current year estimates that the Post Office expenses will exceed the revenue by $89,000,000. The Post Offices of Germany and France are parasites on the railways, which are required by law to carry mails, and in Germany parcels also, free of charge. Nor does the Treasury see eye to eye with the Postmaster-General in this matter, for ever since the days when Charles II. granted a monopoly of the Posts to his brother, the Duke of York, the Post Office has been treated, not as a self-supporting institution, but as an engine of taxation. In the last sixty or seventy years it must have turned over to the Exchequer net profits of something like £200,000,000, even after performing gratuitous services, now estimated as worth nearly £30,000,000 per annum, for other branches of the Government. Whether it is right that the Post Office, as a whole or in each of its separate departments, should be self-supporting, is a question which need not be answered here. The point is that there is need for more clear thinking on the subject.

Another illustration of this need is to be found in the special case of the Parcel Post. When the Post Office first undertook the carriage of parcels, it made an agreement with the railway companies by which 55 per cent. of the receipts from all parcels carried by railway should be handed over to the companies as payment for their share in the work. Many years afterwards, the Post Office discovered that, if on certain populous routes, *e.g.* London to Brighton or Reading, it carried the parcels by road, it could retain for its own benefit the whole receipts, and that its expenditure for carriage would be less than the 55 per cent. which would have to be paid to the railway companies if the parcels went by rail. Good business doubtless, if that were the whole story. But observe the implications. The cost of

actual conveyance on the railways would have been very small; the parcels are carried by road; the ratepayer pays for the resulting wear of the road; and the railway companies, having lost their net revenue from the business, are entitled to claim from the Rates Tribunal an increase of rates on other traffic to recoup them for their lost profit.

In respect of shipping, the accepted theory is that the traffic shall bear the total expense, including provision and maintenance of that portion of the road—the docks and approach channels—not provided and maintained free by nature. In the great ports, such as London and Liverpool, the theory is acted on. But there are many exceptions. The railway ports as a rule do not pay their way, and the deficit is charged against the railway revenue proper. And not a few localities—Bristol, Manchester and Preston, for instance—charge a portion of the cost of their terminal facilities upon the local rates, believing themselves to be recouped by the indirect gain to the community from the development of the port.

Shipping subsidies have too long and involved a history to be more than mentioned. Sometimes they are payments in return for a right to commandeer for war purposes, or for structural modifications valuable only when the ship is employed in warfare, but more usually they are defended either on the "infant industries" theory, or on the ground that the existence of a merchant fleet is in the interest of the whole nation, and in competition with rivals more favoured by nature can only be maintained at the expense of general taxation. But in this matter the policy of a nation is determined not so much by itself, as by the action of other nations. The subsidies to air service, telegraph lines and cables, stand on the same footing. Here, too, one nation may force the hand of another. It has been authoritatively stated recently that the English air service between London and Paris might be self-supporting to-day were it not that the competition of heavily subsidised French services has forced down the charge to the passenger below the point which covers the total cost.

One thing this summary makes clear. No general principle can be disentangled from the different treatment by different Governments at different periods of the various means of communication. Nor would the present writer venture to suggest that there is any general principle capable of universal application, though perhaps some rules for guidance in a work-a-day world may be put forward in the following shape.

There is a real distinction between the cost of providing a

means of communication, which is of general—or at least of wide—public benefit, and the cost of its use, which normally benefits only the particular users. There is, therefore, no *a priori* objection to charging upon the public at large, or upon certain sections of the public, the whole or a portion of the cost of provision. And especially in the case of new countries or new forms of communication, it may be in the public interest that this should be done. On the other hand, the practical difficulties are so great that, if the users can and will in practice pay the total costs, it is best to leave them to do so.

But it is incumbent upon the Government so to shape its policy as to encourage that means of communication which in each case is on the whole the most economical to the community at large. To permit individual users to employ a means of communication which, though the total cost is greater, is cheaper to them, because they can impose upon the taxpayer or ratepayer a portion of the cost, is economically unsound. Yet our Government—as indeed all Governments—does this. Having regard to the great increase in the costs of communications in the last few years, and the still greater increase in the share of these costs that is falling upon the public, it is submitted that the time is ripe for a reconsideration on broad lines of the policy of the past.

W. M. ACWORTH

THE POLISH MARK IN 1921

A STUDY IN EXTERNAL AND INTERNAL VALUES

THE mark currency was introduced into Poland by the Germans in 1916 during their war-time occupation of the country. In that year the Polish National Loan Bank was set up and was given the right of issuing bank-notes. It continued to exercise this function after the collapse of the Germans in November 1918, and in return for this privilege it made advances to the National Government. Thus the Polish mark came into being; during the course of the year 1919 it was brought into general use throughout the Polish lands.

In 1919 and 1920 the issues of paper currency proceeded steadily. The necessity for this was, partly, the increase of the area over which the currency had to circulate; but the expansion chiefly came about in order to enable the State to pay its way at a time when the machinery of Government had not been organised. Provisional Budgets for the periods January to June 1919, July 1919 to March 1920, and April to December 1920, all showed large excesses of expenditure over revenue, and the balance had to be made up by fresh advances from the National Loan Bank and further issues of notes.

The external value of the currency was, meanwhile, declining continuously. The Warsaw rate on London, which was at 44 at the end of January 1920, rose to 445 by the end of the year, and to 2150 at the end of 1921. The Budget of 1921 did not appear until the end of July. It showed an estimated deficiency of 73 milliards. Income covered only 65 per cent. of the total expenditure; and, in fact, the deficit had to be made up to a large extent by issues of paper currency. The Budget estimates, however, were themselves falsified by the further fall in the value of the mark. Prices rose, and the cost of living increased, necessitating adjustment in the salaries and wages of officials, railway staff, and other State employees. State income was swelled to a certain extent; but not sufficiently to balance the rise in expenditure.

Continuous inflation was not the sole cause of the depreciation and fluctuations of the mark. Political factors worked powerfully to this end during 1921, and were aided by much reckless speculation. Relations with the Russian Soviet Government were in a very precarious state early in the year, though there has been

marked improvement lately. But the Upper Silesian controversy proved to be the greatest difficulty. The crisis reached its height in September and October, and it was at this very time that the mark sank to its lowest level. In the latter part of October came the award of the League of Nations, and the mark recovered to a certain extent, its external value doubling as rapidly as it had fallen before. The inter-relation existing between the external value of the mark and the volume of paper in circulation is shown by the following table :—

TABLE A

End of the month.	Rate of exchange on London.	Rate of exchange on New York.	Advances to the State by the Bank.	Increase over previous month.	Notes in circulation.	Increase
			(Milliards.)	(Milliards.)	(Milliards.)	(Milliards.)
[illegible] .	2,150	620	59·6	—	49·1	
January 1921 .	2,900	750	65·6	6	55	
February ,, .	3,300	830	77·1	11·5	62·6	
March ,, .	3,250	800	88·6	11·5	71	11·4
April ,, .	3,100	810	106·6	18	86·8	12·8
May ,, .	4,100	1,030	117·6	11	94·6	7·8
June ,, .	8,150	2,075	130·6	13	102·7	8·1
July ,, .	7,300	2,100	140·6	10	115·2	12·5
August ,, .	11,000	2,855	158	17·1	133·7	18·5
September ,, .	24,000	6,550	178	20	152·8	19·1
October ,, .	13,000	3,100	198·5	20·5	182·8	30
November ,, .	14,200	3,500	211	15·5	207	24·2
December ,, .	12,350	2,900	221	7	229·5	

What has been the effect on prices of this continuous increase of the circulation, and of the fluctuations of the rate of exchange? It will be seen that both these factors affected the course of prices. The figures given below show that, on the whole, wholesale prices of the staple commodities, wheat, rye, and potatoes, rose to a maximum in the last days of October and then declined somewhat during the last two months of the year.

TABLE B.

Wholesale prices in Warsaw (marks per kilogram).[1]

End of the month.	Wheat.	Rye.	Potatoes.
April 1921	100	80	8·1
May ,, ...	77	60	8
June ,, ...	95	82	15
July ,, ...	110	76	22
August ,, ...	90	72	26
September ,, ...	120	76	30
October ,, ...	170	88	32
November ,, ...	120	76	30
December ,, ...	115	74	30

[1] Figures are taken from those given in the *Polish Statistical Monthly* and *Monthly Review of Labour*, both published by the Polish Central Statistical Office.

Sometimes the influence of the element of supply overrides that of the fall of the mark. Corn prices in August and September, for instance, were depressed by the plentiful supply of the harvest. The general course of retail prices is shown in the following table :—

TABLE C.

Retail prices (in marks) in Warsaw at the close of each month in 1921.[1]

		1920. Dec.	March.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Rye Bread	per kg					140	151	171		
Barley Meal	,,					118	159	211	170	159
Potatoes	,,								49	41
Cheese (cheap quality	,,									317
Eggs	each					13				
Milk	per litr			38		71				
Beef	per kg.	135	195		31	338	340	340		
Tea (cheap quality)		130	-			1,100	1,900	1,500	1,586	1,586
Coffee (substitute)		51	102	125	16				165	180
Sugar		61	73	83	8					
Soap	,,	130	166	240					540	500
Matches	per box	2	-			5	- -	10	10	10
Suit of Clothes						4,000	35,000	35,000	32,000	32,000
Boots, Men's	pair	2,825	3,640	4,600	6,4	7,100	12,000	12,700	9,800	9,800
Rent of one room	per day	30	96	96				180	240	240

Maximum prices were attained in the majority of cases during the last week in October. This was very noticeable in the case of food-stuffs. Cereals, both wholesale and retail, dropped quickly early in November, and have since then been as much as twenty to twenty-five per cent. lower, though still far from stable. Some commodities actually rose in price after October—notably tea and the better sort of coffee. Sugar, which is under control, has not much altered. Prices of clothing also fell at the end of the year, and fuel cheapened. The greatest increases in the first ten months are, naturally, found in the case of imported goods, where the price multiplied eight or ten times. Clothing and other non-food commodities increased five or six times in price, dairy produce about three times, and cereals only two to two-and-a-half times.

From these figures we get some idea of the rise in the cost of living. The Polish Statistical Bureau issues a monthly figure for the cost of living. It will be seen that the general cost of living increased by four-and-a-half times in the first ten months, and the cost of food rather less than four times. Since October, while some prices have risen, many others have dropped, and there

[1] Figures are taken from the *Monthly Review of Labour*, and from lists of prices published from time to time in the Warsaw Press.

was by the end of the year a fall of about four per cent. in the general cost of living.

It is interesting to compare these figures with typical examples of rates of wages. Rates, it must be remembered, vary with locality and in different trades, and this is especially true in times of rapid rise of prices, when new wage settlements quickly succeed one another and are made at different times in different industries. The following table combines figures for the estimated cost of living, the rise in prices, and certain typical rates of wages. In order that the influence of currency inflation on wages and prices may be seen, the increase in the circulation is shown in the last column as a multiple of the notes issued on the last day of 1920.

TABLE D.[1]

End of the month.	Daily cost of living, in marks, f a family of four persons.	Index number of commodities ordinarily used by a working family. Jan	Daily cost of food in marks of a family of four persons.	Wages per day of qualified workman the metal trade.	Wages per day of qualified workman in the building trade.	Wages per day of an municipal workman.	Increased circulation shown as a multiple of the circulation in marks on 31st December 1920.
December 1920		11·17	237·3	218	352	212	(49·4 milliards in circulation on 31st Dec 1920)
January 1921		684	304·2	170	596	322	1·1
February		924			681	448	1·3
March		971		716	824	490	1·5
April				716			1·75
May	573·1		391·9	716			1·9
June	648·7		428·2	716	..	..	2·1
July			552·4	859	988	566	2·3
August	973		642·5	859	1,241	718	2·7
September	.271		731·8	1.215	1,468	965	3·1
October			909·6	1,631	1,924	1,222	3 7
November	1,524		918	1,631	2,318	1,513	4·2
December	1,495			1,631	2,296	1,513	4·6

From these figures it is possible to obtain some idea of economic conditions during this period of inflation. The external value of the mark, as measured by the daily rate of exchange, fell steadily for the first nine months, ending with a deep dip in September; then it rose sharply at the end of October and was, generally, more stable during the last two months. The volume of paper currency in circulation increased by leaps and bounds. Prices showed the influence of both these factors, but rather lagged behind the great fall and recovery of the exchange in the autumn. The peak was reached at the end of October, and since then there

[1] The figures in the second, third and fourth columns, showing cost of living, and those in the fifth, sixth and seventh, showing rates of wages, are taken from the Polish *Monthly Review of Labour.*

has been a slight falling off. Comparing the influence of the two factors of exchange fluctuations and currency inflation respectively, we may say that the trend over the whole year was upward, closely following the successive increases in the circulation, but that in September and October the influence of the external rate was strong enough to cause the abnormal rise and fall of those months. In general, however, it is clear that inflation was the stronger influence of the two. Wage-rates followed prices closely on the whole; they reached a maximum about the end of October and beginning of November, and thereafter remained approximately stable.

The rise in prices actually outstripped the rate of inflation of the currency from July to November, and this was unquestionably the direct result of the catastrophic fall in the rate of exchange. The connection between the external rate and the level of prices was largely a psychological one. Traders and others had begun to follow the daily rates closely, and assumed that these rates gave a rough idea of the real purchasing power of the mark. This was not really true, as will be shown later; but there had been in the first half of the year a fairly constant relation between the two. So wholesale prices and even retail fixed prices leaped upwards, following the soaring exchange rates. The prices of commodities that had to be imported from abroad were of course even more directly influenced by the external purchasing power of the mark at this time. During November and December, however, after the mark's partial recovery, prices and note issues came once more to show approximately equal increases over their level at the beginning of the year—that is, rather more than four times the corresponding figure for the end of December 1920. Wages seem by the end of the year to have increased a little more rapidly, though the unskilled labourer, apparently, could even then barely make both ends meet on his normal wages. On the whole we may conclude that at the end of the year the decrease in the purchasing power of the Polish mark was almost exactly proportional to the increase in the volume of the circulation.

Quotations of prices and wages in depreciated currency are, however, always misleading, because if we endeavour to convert marks into sterling, according to current rates of exchange, it is apt to give results that are almost ridiculous and that do not help us in the study of internal economic conditions. An attempt is therefore made in the table below to arrive at some truer expression of the internal purchasing power of the mark relative to sterling :—

TABLE E.

End of the month.	Weekly cost of living in Warsaw for family of four persons (marks).	Estimated average weekly cost of living of a working family in England.	Ratio: estimated relative purchasing power I.	Index number for commodities ordinarily used. January 1914 = 100.	Cost of living index-number given in *The Labour Gazette*. July 1914 = 100.	Ratio: estimated relative purchasing power II.	External value of the mark: rate of exchange on London.	Ratio of external to mean internal value.
		£						
December 1920	2,503	5·3	174	11,173	265	422	2,150	4·5
January 1921	3,155	5	631	14,084	251	561	2,900	4·9
February ,,	3,814	4·8	795	17,024	241	706	3,300	4·4
March ,,	4,026	4·7	857	17·975	233	771	3,250	4
April ,,	3,863	4·6	840	17,214	228	756	3,400	4·3
May ,,	4,012	4·4	912	17,909	219	818	4,100	4·7
June ,,	4,541	4·6	987	20,270	219	926	8,150	8·5
July ,,	5,759	4·4	1,310	25,709	222	1,158	7,300	6
August ,,	6,811	4·4	1,518	30,467	220	1,400	11,000	7·5
September ,,	8,918	4·2	2,123	39,817	210	1,900	24,000	11·9
October ,,	10,899	4·1	2,658	48,658	203	2,397	13,000	5·1
November ,,	10,668	3·9	2,735	47,628	195	2,412	14,200	5·5
December ,,	10,465	3·8	2,751	16,710	192	2,134	12,350	5·1

It will be observed that two different bases have been taken for the calculation of the relative purchasing power of the Polish mark and sterling. The first is that of cost of living. For Poland the figures are the same as those shown in the second column of Table D above; it has already been pointed out that they vary approximately according to the volume of marks in circulation, with an important exception in the period from July to November. For the United Kingdom, the figures are based upon a roughly estimated budget of a working family before the War, details of which are to be found in *The Labour Gazette* of February 1921; the percentage increases for the various classes of commodities are shown in the same publication each month. The general percentage increases in prices are shown in the fifth and sixth columns, the Polish figures being those shown in the third column of Table D. Two sets of ratios are thus obtained, the former based on cost of living, the latter on increase of prices. These monthly ratios are expressions of the relative purchasing power of sterling as against the mark at the different dates. The two sets of figures differ somewhat, the cost of living ratio giving a higher value to the pound than the price ratio; this difference can sufficiently well be accounted for by the vagueness of the term "cost of living," and the uncertainty regarding the weights that should be given to the different factors of which it is composed. The general tendency of this internal purchasing ratio is, however, clearly revealed—the continuous fall of the purchasing power of the mark relative to sterling.

This decline of the internal purchasing power of the mark is

no less conspicuous than that of its external value as shown by the current rates of exchange. The two, however, differ widely, and it is important to have clearly in mind this distinction whenever we have to think of the value of the currency of one country in terms of that of the other. In the last two columns of Table E. this distinction is made much clearer and a comparison is made between the internal purchasing ratio and the external ratio as disclosed by the rate of exchange on London at Warsaw during the year. The enormous gap between the two is at once apparent. It seems that, normally, throughout the year, the external value of the mark was one-fourth to one-fifth of its internal value. But during the months June to September, when the rate of exchange fluctuated enormously, the proportion at one time fell as low as one-twelfth. This period coincided exactly with the crucial days in September and October, when, owing to political difficulties originating in the Silesian controversy, movements on the European exchanges were thrown into complete disorder.

The disadvantages resulting from this great gap between external and internal purchasing power are sufficiently clear. The whole position is abnormal; and if it were not for the fact that inflation has not ceased,[1] such a state of things could not continue. The two values must sooner or later coincide. Hence arises the instability of the economic outlook. Importation becomes almost impossible, and this is particularly serious for Poland, because it is above all essential that she should reconstruct her industries which the War destroyed, and machinery and tools of all kinds are urgently required. From an internal point of view Poland is more fortunate in that she is to a very large extent self-supporting. Her harvests are sufficient to feed her population and her industries cover a wide range—textiles, coal, oil, iron and steel, chemicals, leather and wooden goods. It is no doubt due to this self-sufficiency that normal life can be carried on in spite of the great and continuing divergence between the external and internal values of the currency. But stabilisation and the end of paper issues is clearly essential and must be undertaken at any cost. This demands the most drastic economy and the most careful imposition and collection of the necessary taxation. The most expert advice is required. Fortunately, a determined effort is actually being made, and it is to be hoped that the capital levy being raised now and the other measures proposed will prove to be

[1] Since the end of 1921, the position has improved; and the increase in the paper circulation has been comparatively small.

a step towards establishing a solid basis for the prosperity and welfare of the community.

The course of the depreciation of the Polish mark is deserving of study not only from the point of view of the prosperity of the Polish people—a people whose welfare is of the greatest importance for Europe—but also as showing the results of a certain set of influences on a currency that consists solely of paper without any form of metallic backing. The particular influences in question are first excessive issues of money by the State, and secondly certain violent outside political movements the importance of which always tends to be magnified by the inevitable speculation on the "bourses." The case of Poland is admittedly abnormal, and the year 1921 was abnormal. But as an extreme example, the course of the Polish mark in 1921 serves to give an illustration of the working of principles of quite general application, the results of which are making themselves manifest in half at least of the countries of Europe at the present day.

JOHN HUBERT PENSON

AMERICAN VIEWS ON THE EUROPEAN PROBLEM

America and the Balance Sheet of Europe. By J. F. BASS and H. G. MOULTON. (New York: The Ronald Press Company. 1921.)

International Finance and its Reorganisation. By E. M. FRIEDMAN. (New York: Dutton & Company. 1921.)

PROPOSALS to deal with the international financial results of the war succeed each other quickly; and these books present the problems as they appeared at the end of 1921. The reparations question has already been modified, and may have been modified again by the time this review is printed. It is generally believed that this year must see a reduction to terms which the impoverished trade of the world can carry, or a smash; and that the action of America will have a profound influence on which of these results emerges. To the realisation of the oncoming issue these books contribute in different ways; the former by a carefully built-up, though popularly written, study of the development of the material and moral aspects; the latter by a compendious presentation of the data for judgment.

The general thesis of the authors of the former work is that, while a reversion to the traditional American policy of isolation was the inevitable result of the peace settlement, it is just as inevitable that economic forces will lead to co-operation with Europe in the solution of post-war problems. "Europe as the controlling element in the world economic situation is a fact which simply will not down. . . . The paramount American issue of the next four years will be the European question." In the readjustment after the period of inflation, "European conditions will largely determine American conditions," and the outstanding problem of the world will be "the formulation of a program of international action designed to prevent progressive social and economic decadence." The importance of these propositions is their American authorship, and the part which they aim at playing in a campaign of enlightenment as regards European conditions. "If ever there was a time," the authors conclude, "when the truth is needed to set men free, it is now.

If ever there was a time when evasion, concealment, and pussy-footing were political virtues, it is *not* now."

There are some notable similarities of both exposition and protest between this book and Mr. Keynes' *Revision of the Treaty*, published at the same time. Especially is this so with regard to what Mr. Keynes calls "the large element of injurious make-believe" which has marked, in his view, the last two years. *Sunt duae voces*, but not *geminae*, the outside and the inside, the former with two tones; and the stinging sentences of the first chapter of the *Revision of the Treaty* are recalled by similar pleas for economic sincerity in this American study. The modern politician, says Mr. Keynes, "must have enough intellect to understand the inside opinion, enough sympathy to detect the inner outside opinion, and enough brass to express the outer outside opinion." So our American authors see two strata of policy, one fabricated for public consumption, the other for the information of Foreign Offices only. What hope is there, they ask, while fundamental illusions as to reparations and Allied debts, are discussed frankly "only in undertones and in inner offices"? As a contribution to plain speaking, and as a plea for ideals in future international policy, their book fulfils its mission; it is remarkably complete in material, clear in arrangement, and adapted to the needs of the general reader.

The first part deals with "the situation as it really is," taking as indices the depreciation of exchanges, the state of foreign trade, the national debts and budgets, and the banking reserves. Some of the conclusions of this statistical study have not been borne out—for example, as regards the British budget; but the reactions on each other, since the conclusion of the post-Armistice boom (the "hand-to-mouth trade"), of the depression, the budgets, and the currency are very plainly set out, and call for no comment. The authors see no immediate signs of recovery from the "credit debauch"; the depression, unless strongly handled, will get worse. There is no single point at which a remedy can be first applied; it is a question of all-round policy. And even then trade, which has lost confidence, will require an "initial whirl" to set its engine running, which the authors believe will come from schemes of public works. This is not a very strong conclusion. It has been common, in course of the depression, to indicate the volume of available public works which might be put in hand, "available" being taken to mean that their necessity in the future can be foreseen. In that sense, it is difficult to set a limit to what is available. But in fact what is available is

what can be financed; and this has now been so fully explored that the revival is hardly likely to depend on it.

The Labour aspect of the question is more particularly dealt with in a somewhat inconclusive chapter on "Economic and Social Disintegration." The inference (p. 132) that since the British people spent in 1920 seven per cent. more of the national income on food, drink, tobacco, dress, etc., therefore "they lived substantially better," is plainly erroneous. What does follow from the general facts is that, since the nation as a whole is poorer than before the war, any class which, as shown by an index number of wages and prices, obtains the real equivalent of 1914, gains relatively to the rest of the nation. One may agree, however, with the authors' contention as regards the burden of subsidies, especially the growing unemployment doles. Conditional as they now are on idleness, a way may yet be found of using them as subsidies to *wages*, enabling employers to cost down to a level which will tempt the market. The administrative difficulties are obvious, and could be faced only if there were great devolution of responsibility for unemployment. Another problem suggested by this chapter is the relation of the Labour side to the finance side of revival. Is "getting to work" the critical point in the chain, as Mr. Brand argues?—healing by the auto-suggestion of confidence? There are unemployed boot-makers and textile workers, each class of them having a need for the products of the other, and each willing to supply the need. If they would only start, would not the machine get under way, and the finance adjust itself? This paradox of unemployment is not so simple. The mutual support of effective demand can only be brought about so far as the unemployed classes are absorbed in the *general* processes of industry; they cannot mutually support each other, and the hitch may be in factors remote from both. As finance becomes more abnormal, it becomes to a less degree an index, and to a greater degree a controller of industry; it will not at present "give" to a mere industrial push. The outlook of Labour in these times has to be wider than the economics of industry; the capitalist is not the terminus of the argument. Anyone involved in wage negotiations appreciates the new perplexity. On the other hand, while problems of high finance have their far-reaching influence on helping industry to work, the pause is a right time to consider what in industry may be made more workable. The "New Order" now makes more circumscribed but very definite claims; their settlement is an essential aspect of revival, taking a long view of it. The authors

are somewhat negative on this point; they think the possible spread of Bolshevism is a real danger, but would prefer "a more propitious time" for important industrial changes.

Part II deals with "The Reparations Dilemma," and especially with the duty of the United States to ease the European position. In the chapter on the History of the Reparations Settlement, they do not make it clear that the final terms merged the balance of 12 milliards due on May 1, 1921. They point out that the sequestration of German property abroad is a less gain to the Allies than a loss to Germany, since the value of such property depended on a German organisation of which it was part. The treatment of the question of Germany's ability to pay is under the same headings as that of Keynes (*Revision*, p. 72). Their calculation, which must be taken as illustrative, of the balance of exports, is based on 1913 figures of values, multiplied by two, and diminished by a third for loss of territory and resources. Keynes' calculation (*Revision*, pp. 73–4) is a post-war one, but the general ratios are comparable. With the productivity of labour undiminished, and everything running full, and gold prices at twice pre-war, German exports must increase about 30 per cent. to 13·5 milliards, while imports decrease about 25 per cent. to 8 milliards. The authors conclude that this, or any likely adjustment of it, is out of the question, and accept Keynes' estimate of 40 milliards over a period of years as "a very generous one." As to the finance of the operation, to pay 4 milliards a year would, they conclude, require up to 20 per cent. of the national income, agreeing again with Keynes, who gives 43 per cent. in taxation all over, of which half is for reparations. In fact, the Budget estimates for 1922 require for reparations and armies of occupation over 50 per cent. of the net expenditure, 143 out of 265 milliards, of which only 16 milliards is expected to be covered from revenue. This is prior to the Allies' demand for an extra 60 milliards of taxation. In the opinion of the authors, even Great Britain in the boom year of 1920 could have paid out of revenue only about a third of the full requirements imposed on Germany by the settlement. As to the willingness of the Allies to take payment in goods, tariff policies are the reply. Reparation bonds could not, they think, be marketed in the United States at more than 50. Even the Wiesbaden agreement may raise difficulties; and I find a February report of the Paris Chamber of Commerce protesting on the ground that, "though offering certain financial advantages, it will only increase the disabilities from which certain French

industries are now suffering, that it will diminish French production, and offer a premium on German imports." [1] Hence the picturesque summary of the position which the authors quote: "We believe Germany should be forced to pay; we doubt whether she can pay; but, if we find that she can, by jingo we won't let her."

They do not regard further credits to Europe as a natural solution. They doubt the efficiency of the Ter Meulen plan, till European budgets balance and governments can give effective guarantees. Nor do they hope for stabilisation of exchanges, which are likely to be alternately bulled and beared by credits, debts, and reparations, apart from the influence on currency of unbalanced budgets. Having piled up this impasse, what is their American view of the way out?

Their central demand is for the cancellation of *all* war debts between governments. These, however, have not hitherto affected exchanges *directly*: although the large impending totals may create or enhance a sense of financial despair or recklessness. Their appeal to America is mainly on the moral issue. "There is no more reason why we should charge the Allies for materials and supplies than for the cost of our army." "From the time of the sinking of the *Lusitania* the war was America's concern." "Europe had utilised practically all of her available resources before the United States officially entered the war." But for America, the war would have been lost.

This is a proposal to redistribute the costs of the war, so as to increase the burden of those nations who lent most. It is a sort of capital levy, but very roughly assessed. The moral argument is not easy to sustain; it would perhaps be better put as a "sporting" thing to do. There is a business aspect even of crusades; and if claims are to be sacrificed after the event, it would rather be of the rich against the poor than of one nation against another. That a good deal of argument is possible is shown by the discussion of the question in the second of these American contributions to the financial problem. The chapter on Inter-Allied Debts is a defence of the official and often repeated American attitude on the matter. That England cancelled nearly all her Allied indebtedness after the Napoleonic war is, the author thinks, no parallel, the Allied debt being then only 6 per cent. of the war costs, while to the United States it is about 30 per cent. The American loans were floated and dealt in on the understanding that they were not subsidies, but formal

[1] *Economic Review of the Foreign Press*, 1922, p. 286.

obligations, and the market has relied on most definite and repeated assurances on the point. But is it not an answer to this that the cancellation of the debt could only be made by Congress itself, and not by any officials whatever? I doubt also the argument that England and France received loans when not absolutely pressed for them, since, for example, only a quarter of England's foreign securities were mobilised for sale; the crux of the difficulty, the author says, being "the readiness with which a too generous creditor advanced much more than the debtor's condition warranted." The fact that some of our remaining capital was foreign does not show that we could have sold it with less sacrifice than the same amount of home capital; the distribution of our resources is not the question, but their adequacy; to a considerable extent, foreign investment was the basis of essential imports of food. Mr. Friedman makes stronger points in testing ability to pay by reference to the military items in European budgets—"the belief of the Sandwich islander that the spirit of the slain enters the victor's body and strengthens him:" and to the German reparations account which, if really thought payable, must surely mean that France with all her gains can pay America one-tenth as much. Again, it is of course true that America had least to gain, and was always regarded as an associate rather than an ally. Mr. Keynes' remark on the "intolerable result" of the Allies paying indemnities to each other instead of receiving them from the enemy, is replied to with the contention that, in effect, the Allies must meet the debts somehow, if not as between nations, then as between citizens in creditor countries. The war debts of Europe, Mr. Friedman finally claims, are America's "last hostage for a righteous peace." Against anything but the "crusade" idea, combined with the sporting spirit, Mr. Friedman's case is on the whole quite good. It is to be remembered, however, that President Wilson, in calling the American troops crusaders, was expressly indicating his distinction between them and any others; and this would be a good reason for insisting, from our side, on making payment to the last dollar.

Neither of these books considers the more recent proposals to merge reparations and debts in one scheme. Mr. Lloyd George's Paris suggestion in 1921 to act as if the debts did not exist ("if the creditor does not worry me, I do not worry the debtor") has now been nipped by the definite presentation of the American claims; in possible anticipation of which the Press flew the kite of a contingent German liability, for part of

the reparations, reducing the effective liability to 45 milliards. This meant that Europe was to say, loudly enough for America to hear, that if the financial system in Europe broke down under the attempt to exact full payments, the responsibility would be on America; a result which would make her an arbiter in Europe almost as much as if she made remission dependent on her approval of the limits set to military expenditure in European budgets. On the other hand, the variant of this scheme, that Germany should take over European liabilities to the United States, is tantamount to the marketing there of reparation bonds with a double endorsement; but the real problem is the power to absorb them in any case. And will this really improve the trade and exchange aspect of the question, since Germany will pay America with drafts on other countries, against exports which in general will still be forced? "It is good business," say Messrs. Bass and Moulton, "to cancel the debts": and this is the best ground to take, to avoid undesirable international relationships. In the end, the reason for this is that questions of reparation for injury and of indebtedness do not work out between nations as they do between individuals; the reply of the Allies to the observations of the German delegates on the first draft of the Treaty affords a good study of these differences.

The currency proposal of Mr. Bass and Mr. Moulton is for the destruction "in carload lots" of certain European currencies, whose depreciation is already a practical repudiation: and for the re-establishment of the gold standard by the distribution, on loan or deposit, of the excess gold of neutrals and America. Normal processes of restoration appear to them too slow. Some such use of the gold supply seems likely to be the outcome of subsequent discussions, which it is needless to anticipate here.

D. H. MACGREGOR

THE BANK CRISIS IN ITALY

The life, death and miraculous resurrection of the Banca Italiana di Sconto deserve a somewhat detailed consideration, for in describing them light will be thrown on certain aspects of the Italian financial system, of whose tendencies they exhibit the extreme consequences.

The Banca Italiana di Sconto (Italian Discount Bank) is of recent origin; it was founded at the end of 1914 by a group of Italian and French financiers with an initial capital of only 15 million lire; its real and effective banking activity did not begin until June 1915, when it was amalgamated with the "Società Bancaria Italiana" of Milan and the "Società Italiana di Credito Provinciale" of Busto Arsizio. Of these two, the first was an unstable concern, which not long before had only escaped bankruptcy through the intervention of a consortium of banks headed by the Banca d'Italia; the second was a recent amalgamation of several small local banks. During the war the Banca Italiana di Sconto developed enormously, and to this development corresponded the gradual increase of its capital to 315 millions and the opening up of branches in every part of Italy and abroad. Whereas in Italy the tendency of the banks to group together has mostly taken the form of a concentration of minor banks round a larger one, the former preserving their autonomy and subjecting themselves only to an indirect influence, the growth of the Banca Italiana di Sconto was largely due to the complete incorporation of local banks. The culmination of this expansion was reached in 1920, when the branches of the Banca di Sconto (which were only sixty-eight in 1915) reached the number of 220, eight of which were in foreign countries, besides four foreign affiliated banks. This number is remarkable when we consider that the other three largest Italian joint-stock banks (Banca Commerciale Italiana, Credito Italiano and Banco di Roma) had altogether, at the same period, a total of 269 branches.

The Banca di Sconto thus found itself in the position of an amalgamation of a series of small banks, with no nucleus—that is, no powerful central institution, able to assimilate the banks incorporated by reducing them to a common type. Each of these minor banks, though transforming itself into a branch of

the Banca di Sconto, kept its organisation, methods and staff almost intact, thus rendering impossible that uniformity and harmony among the various branches which is indispensable if the Central Direction is to run the business on certain general lines and to exercise an efficient control. Besides this, the scarcity of employees caused by the war and the agreement made between the banks, which did not allow of one bank engaging the employees of another bank by offering them better terms, added to the difficulties of organisation.

Another initial weakness of the bank arose out of the conditions of the period in which its activities began. Founded in 1915, at the very moment of Italy's entry in the war, and intended, in spite of its name, for the business of industrial credit (like all Italian banks in the past and the present, after the German model), the Banca di Sconto had, *a priori*, traced the road it had inevitably to follow in the development of its plan of expansion. The only *clientèle* which a new bank could get was formed by the industries which were working on war supplies, and which therefore had urgent need of credits for the transformation and expansion of their works; besides, the solvency of such customers was, for the time being, more than satisfactory, both in view of their great profits and of the certainty of finding in the Government an inexhaustible buyer. Among the group of firms supplying war material, and firms started during the war, which thus gathered round the Banca di Sconto, the "Società Ansaldo" of Genoa took an easy first place well ahead of all the others: so much so that this company was able to ensure for itself the control of the Banca di Sconto through a certain majority of votes in the meetings of the bank's shareholders, being facilitated in this by the fact that at the head of the bank there were men very closely connected with the Ansaldo Company. From thenceforward the fortunes of the Banca di Sconto were indissolubly united to those of the Ansaldo Company, and in fact the former followed all the vicissitudes of the latter up to the final common disaster. The Ansaldo Company, which, before the war, had a capital of 30 million lire and limited its activity almost exclusively to metallurgy, became, during the war, the largest producer of armaments, so that, at the beginning of 1918, its capital had risen to 100 million, its field of action had extended—also by means of affiliated companies—to engineering, to naval and aircraft construction, to mines, to shipping, etc., and these concerns taken together employed more than 70.000 workmen.

The bank which had financed this colossal expansion had, as was to be expected, very soon engaged all its resources in the Ansaldo group to a much greater extent than should prudently have been risked with a single firm; and these engagements reached such a point at the beginning of 1918 that it was not possible to increase them any further. This obliged the Ansaldo Company to seek elsewhere for new financial help and to find some support which would relieve the Banca di Sconto from the precarious position in which it now found itself. The most simple and convenient solution was to extend the method already tried with success on the Banca di Sconto, by getting possession of another big bank. The Banca Commerciale Italiana, the largest of the Italian banks, had been, at least in a period before the war, under the control of German capital. The Ansaldo Company seized the opportunity of combining a patriotic speculation with the satisfaction of its financial requirements. Declaring its intention of "Italianising" the capital of the bank, by "freeing" it from foreign influence, the Ansaldo proceeded to buy up in the Bourses the shares of the Banca Commerciale. But this attempt was at once opposed by another group, the "Marsaglia group" (composed of cotton manufacturers, silk factories, engineering and metal works, etc., and of minor banks, all under the leadership of the Banca Commerciale), which, to defend its own position, also began to buy up the shares. The visible result was that the price of these shares (their value at par being 500 lire) went up in a few days from 800 to 1200 lire. In view of the possible danger to the conduct of the war entailed in these exhibitions of rivalry, the Government intervened. Under its pressure the two groups in June 1918 formed a syndicate, to which were handed over all the voting rights due to the shares of the Banca Commerciale Italiana in the possession of the two groups; they also bound themselves not to buy, individually, any such shares until two years after the declaration of peace.

A few days later (29th June, 1918), and again under the auspices of the Government, the four principal joint-stock banks reached an agreement with the object of eliminating the hostility which had arisen among them in the course of these events. This agreement was kept secret, because its real result was not so much to establish peaceful relations between the banks as to eliminate all competition between them which might be of advantage to the public. This agreement fixed "the most favourable conditions to be applied to customers," that is, it established

maximum limits for interest on deposits, current accounts, etc., and *minimum* limits for rates, charges, commissions, fees, etc., to be charged to clients; it established the number of days' notice required for withdrawing money from current accounts and deposits, the rates for renting safes in the safe-deposits of the banks, and many other charges and conditions. The execution of this agreement was entrusted to a Committee consisting of representatives of the four banks and presided over by a trustee to be chosen by agreement. The Committee had the power to modify, according to the necessities of the moment, the rates and conditions agreed upon, to ascertain any breach of the agreement and to apply fines varying from 10,000 to 50,000 lire for each breach; a bank, if fined, could be exempted from paying the fine only if it dismissed the official responsible for the breach.

This arrangement, though it put an end for the time being to the struggle between the banks, at least in its more obvious forms, did not solve the question which had led up to the struggle: the necessity of relieving the Banca di Sconto of part of its engagements and of financing the Ansaldo Company to the extent of its demand. The attempt to "storm" the Banca Commerciale having failed, the only thing which remained was to have recourse to the public: and in the summer of 1918, the share capital of the Ansaldo was increased from 100 to 500 million lire. The issue of shares (the largest ever placed on the market in Italy by a joint-stock company) was successful, thanks to the support of the Government and of all the banks, and to a patriotic propaganda which made the public believe it was a "national subscription." The shares having the nominal value of 250 lire were all placed at 290 lire.

The new capital thus put the Ansaldo group on its legs again; it helped to pay a large proportion of the debts owed to the Banca di Sconto, and probably would have been sufficient to continue the working of the various industries on a war footing. Unexpectedly, two months after the issue of the shares, the armistice was declared. The Ansaldo group was caught by surprise: its forty factories and works, equipped for the supply of war material, were quite unprepared for transformation into producers of peace-time requirements. For this the directors were gravely to blame, because it was not difficult to foresee the great difficulties which would have to be overcome, in a country like Italy, which possesses scanty iron resources and no coal resources, by an industry of which the basis was the working

of iron and steel, protected by very high Customs duties and able to produce only at prices above the buying capacity of the market. If to these natural obstacles, possibly in themselves insurmountable, be added the difficulties inherent in the transition from war production to peace production, it is evident that the situation was really critical. The new capital having been rapidly exhausted, and also the relief brought by the payment on the part of the Government of 650 million due for war material (which allowed the Ansaldo to reduce its debts towards the Banca di Sconto to about 50 million), it was again necessary to contract debts with the Banca di Sconto until the limit was reached once more. Then, eighteen months after the armistice, the Ansaldo group had recourse to the extreme measure which was perhaps the only means of saving itself which remained to it: that is, it renewed its attempt to take the Banca Commerciale by "storm," declaring that the 1918 agreement had fallen through (though still nominally in force) because the Marsaglia group—that is, the Banca Commerciale—had previously violated it by secretly buying, as Ansaldo affirmed, shares of the Banca Commerciale, with a view to strengthening its own position. The Banca Commerciale naturally denied this emphatically; so that between denial and counter-denial it is not yet possible to know the truth. What is certain is that in February and the first days of March 1920 both groups made enormous purchases of these shares on the Bourses: their value increased by hundreds of points a day, passing from a quotation of 1250 lire on the 4th March to a maximum of 2450 lire on the 9th March; then in a few days the prices went down to the previous level. This time, also, the two groups fighting for the mastery of the Banca Commerciale, being called together by the Government, came to an agreement in which *Ansaldo sold to the Banca Commerciale group nearly all* the shares it possessed and definitely gave up any pretension to dominating the Banca Commerciale, and was compensated for this by receiving several scores of million lire. This unexpected solution was explained in the press by the fear which the Ansaldo group was supposed to have had of not succeeding in gaining the majority in the general meeting, and thus remaining with a big stock of shares bought at excessively high prices without, on the other hand, having the advantage of dominating the bank. This explanation is, however, inadequate. The truth, as I understand from competent authorities, is that on about the 10th March the Ansaldo group had the majority of the shares of the Banca Commerciale. How are we to explain the strange

renunciation by this group of the position of absolute mastery which placed it in the condition of being able to dictate terms? This also still remains a mystery: unless it be that, as Ansaldo had bought the Banca Commerciale shares with the money of the Banca di Sconto, the latter found it an intolerable burden to have to keep hundreds of million lires immobilised for about one month, the time necessary to carry out the operation fully.

It is worth while to describe the developments to which the settlement of this affair led. They are a conspicuous example of the so-called "chain system," which, already in use by Italian industries, now made a startling appearance among the banks. As it is prohibited by law for a company to buy its own shares, except with the profits resulting from a balance sheet legally approved, the Banca Commerciale Italiana set up a new company (the "Consorzio Mobiliare Finanziario") with a capital of 150 million lire, and placed its shares among the members of the Marsaglia group, appointing the Directors of the Banca Commerciale itself to the Board of Directors of the Consorzio. In the articles of association it was provided that the shares of the new company should be made out in the name of shareholders, and that the shares were not to be sold to persons not approved by the Board of Directors. The Consorzio Mobiliare bought the shares of the Banca Commerciale belonging to Ansaldo at a price much higher than the current price: to compensate it for this loss, the Banca Commerciale increased its own capital and allowed the Consorzio to have the new shares at a price much inferior to market quotations. The Consorzio thus became the holder of the majority of the shares of the Banca Commerciale and gained complete control over it. But the sum necessary to buy these shares was about double the capital of the Consorzio. The remainder was borrowed from another bank, the Credito Italiano, which took, as collateral, the shares of the Banca Commerciale belonging to the Consorzio.

At this point the story becomes complicated. The Credito Italiano in 1918 had also been the object of an attempted "storm" on the part of the "Fiat" group (motor-car industries), which in 1920 still possessed a big stock of shares of the Credito Italiano. The Credito Italiano at the same period also founded a new company (the "Compagnia Finanziaria Nazionale"), which bought at a high price the shares of the Credito itself which were in the hands of the Fiat, and at a low price the shares of a new issue of the Credito. And as the capital of the "Compagnia Finan-

ziaria" also was insufficient, the Banca Commerciale lent the necessary capital against a security consisting of shares of the Credito Italiano. In other words, the result was an exchange of shares between the Banca Commerciale and the Credito Italiano: and that is, in substance, the indirect purchase of their own shares on the part of each of the two banks which resulted in a real diminution of their capitals.

In consequence of these facts, two lawsuits were begun: one against the directors of the Banca Commerciale and the Credito for the illegal purchase of their own shares, the other against the directors of the Banca Commerciale, Banca di Sconto and Ansaldo for the "aggiotaggio" (illegal speculation) carried out in the operations on the Bourses in March 1920. As all these companies had been provident enough to appoint some Senator on their Board of Directors, these lawsuits had to take place, as prescribed by the Constitution of the Kingdom of Italy, before the Senate constituted into a High Court of Justice, and on account of the slowness of these proceedings the lawsuits are still dragging on.

After the failure of the second attempt to take by "storm" the Banca Commerciale, the Ansaldo group found itself in the same position as in 1918. The circumstances, however, were more serious: whereas in 1918 it had saved itself by increasing its capital, this was no longer possible in March 1920, when its shares, issued at 290 lire, fluctuated between 210 and 220, and even this price was kept up only by artificial means. There was no way out of the difficulty. More money was got out of the Banca di Sconto (which increased its advances to the final figure of 750 million lire), and the bank in its turn made every effort to attract deposits from the public. With the opening of new branches, with immense advertising, it succeeded in 1920 in obtaining a remarkable increase in its deposits, almost keeping pace with the other banks, which in that year of inflation greatly increased their deposits. It had recourse on an even greater scale than before to the rediscounting of its bills with the Banks of Issue, obtained from them advances on securities, so that by the end of 1921, when the bank went into moratorium, the Banks of Issue were its creditors to the amount of 1700 million lire. To increase such advances yet further the bank introduced the system, afterwards followed by many other banks, of accepting from the public as a loan, fixed for at least one month, Government securities, paying on them ½ per cent. or 1 per cent. "commission" per year, and thus succeeded in getting 770 million of securities; these securities were then given as collateral

to the Banks of Issue. As the bank paid to the latter the bank rate (6 per cent.) plus the ½ or 1 per cent. to the depositor, it is patent how costly this operation was. This is a curious example of the actual splitting of the interest in its two component parts—the interest on the capital and the insurance on the risk—a very harmful division, as the entire risk is thus borne by those who, presumably, are least able to estimate it.

As long as the boom lasted these artifices allowed the Banca di Sconto to go ahead recklessly; so much so that in the balance-sheet for 1921 a profit of about 40 millions (certainly non-existent) was declared and a dividend of 8 per cent. was distributed. The evidence that these profits were non-existent is afforded by the refusal of the Managing Director to receive 694,000 lire due to him as his share of the profits, this refusal being obviously calculated to be used as an "alibi" for himself. But at the beginning of the crisis things changed. The public, alarmed by the rumours circulating about the bank's real situation, began early in 1921 to withdraw their deposits. The withdrawals were intense in January and February, and in some towns in the north things assumed the character of a panic. It seems that in some of the branches in Liguria, where the conditions of the Ansaldo Company were better known, and in certain health resorts, frequented by foreigners (the Directors of the Banca di Sconto said that the rumours of the bad condition of the bank came from abroad, where they were set in circulation by competitor banks), during this period up to two-thirds of the local deposits were withdrawn. In the two following months there was a lull in the withdrawal of deposits. But then the collapse began again, until the general panic was reached in last December, which ended with the closing of the bank.

The following table gives the amounts of the deposits in the bank according to the monthly statements of accounts during its last twelve months of life.[1]

[1] It is to be noticed that the phenomenon was not general: in fact, the deposits in the other three large joint-stock banks showed the following increase:

(In Million Lire.)

	Savings deposits	Other deposits (Corrispondenti saldi Creditori).
December 31, 1920	2290·3	9101·2
November 30, 1921	2640·6	10138·0

(In Million Lire.)

	Savings deposits.	Other deposits (Corrispondenti saldi Creditori).		Savings deposits.	Other deposits (Corrispondenti saldi Creditori).
December 31, 1920	939·1	3570·7	June 30, 1921	921·1	3109·9
January 31, 1921	914·7	3429·1	July 31	926·2	3142·8
February 28	903·5	3275·1	August 31	928·4	3181·5
March 31	907·2	3308·7	September 30	930·4	3150·8
April 30	915·4	3322·7	October 31	922·1	3074·5
May 31	921·1	3194·5	November 30	902·4	3093·4

It is noticeable that whereas the diminution of savings deposits was 4 per cent., that of the other deposits was 13·3 per cent.; indeed the true diminution of the latter was certainly much greater, but this was concealed by the fact that in the totals for the other deposits the deposits withdrawn by customers were gradually replaced by new debts contracted with the Issue Banks.

During December matters moved quickly. In the offices of the Banca di Sconto depositors crowded to withdraw their deposits. The announcement that an attempt would be made to save the bank, to which reference is made further on, had a disastrous effect and caused large withdrawals of foreign deposits. The final blow which brought the panic to sensational proportions was given by the news that the other banks refused to pay the "circular cheques" issued by the Banca Sconto, unless presented by a client of their own. The reason for this act, contrary to the custom prevailing up to that time, was, as it was affirmed, that the Banca Sconto was forcing the circulation of the "circular cheques" issuing them, not in response to a real demand by the public, but to get them cashed by their agents at other banks and thus get a twenty-four hours' loan from them. A few days later, on the 29th December, the Banca di Sconto closed its doors.

The Banca di Sconto had not been allowed to fall without some attempt being made to save it, not by the other ordinary banks, of which the relations with the Banca di Sconto were of an unfriendly nature, and of which their own serious difficulties at that moment destroyed any hope of their coming to the rescue, but by the Banks of Issue, whose rightful function it is considered to be to hold out a helping hand to other banks momentarily embarrassed. And if the deposit banks had not this last line of

resistance to rely upon, they certainly could not finance industry on the present large scale. On the other hand, the taking over of immobilised positions does not in itself constitute a danger for the Banks of Issue, owing to the extreme " super-elasticity " of the Italian circulation due to the right they have of issuing uncovered notes as loans to commerce in unlimited quantity, on condition that they pay to the State an annual tax on excess of circulation equal to the official discount rate. In practice, these issues are checked by the fact that the Banks of Issue, as they never lend at a rate higher than the official one, have to bear in real loss the expense and the risk of an over-issue of bank-notes. If, in spite of this, bank-notes are issued in great quantities, it is because of the great influence which the Government exercises over the Banks of Issue. But if the Government can influence the Banks of Issue to aid the immobilised banks with loans, it cannot, without bringing them to rapid and certain ruin, oblige them to make gifts to those who have suffered real losses. At an early stage, as the real position of the Banca di Sconto was not known, it was decided to give it the aid asked for. On the 24th November, the three Banks of Issue (Banca d'Italia, Banco di Napoli, Banco di Sicilia) and the three principal joint-stock banks (Banca Commerciale Italiana, Credito Italiano, Banco di Roma) constituted a consortium which undertook a risk up to 600 million lire with the declared aim " of easing the demobilisation of the credits of the Banca di Sconto with the Ansaldo." The 600 million lire were in reality almost entirely subscribed by the Banks of Issue, while the ordinary banks were willing to contribute only on a small scale (about ten million lire each), and also for these they were guaranteed by the Banks of Issue. The latter, in their turn, were relieved by the State of every risk of loss in this and in every other transaction by a decision to the effect that one-third of the yield of the tax on over-issues paid by the Banks of Issue, instead of being passed to the Treasury, should be put aside up to the end of 1923 as reserve fund, from which would be taken the amounts necessary to make up the losses of the Banks of Issue and provide them with a minimum profit of 5 per cent. Of the 600 million of the Consortium, 300 were given to the Banca di Sconto against Ansaldo bills guaranteed by other securities, another hundred against Ansaldo bills without guarantee, and the remainder was not utilised.

At the end of December, a sort of Banking Supreme Council formed by the representatives of the Government, of the Banks

of Issue and of the big Joint-Stock Banks held a series of meetings, during which it was ascertained that to carry out the rescue it was necessary to have available two milliards of lire. Notwithstanding the pressure brought to bear upon them by the Banks of Issue, the Joint-Stock Banks refused to participate in the operation; and as the Government did not dare to take upon itself the whole of such a risk, it was decided to abandon the Banca di Sconto to its fate. The only legal way open was to declare insolvency. In the vain hope of attenuating, by means of a verbal stratagem, the impression likely to be made by a declaration of insolvency on such a scale, the Government renewed by decree certain clauses of the Commercial Code which had been abolished in 1903. But while these old regulations regarding moratorium extended to all business, including all commercial companies, by the new decree of December 1921 the right to apply for a moratorium was limited to commercial companies with a capital over five million lire. Besides this, whereas with the former code it was necessary to prove, in order to obtain the moratorium, that the assets exceeded the liabilities—and this could be the only justification of favourable treatment—the only condition which the new Decree insisted upon was that the companies "be able to show reliable evidence that their suspension of payments is the consequence of extraordinary and unforeseen or otherwise excusable events, or else evident reasons making this desirable in the interests of the mass of creditors." The Decree also ordered a general meeting of the creditors to be called at once after the declaration of moratorium, unless it be impossible, and "there be at the same time absolute reasons of public and general interest." It became at once evident that as the Judges were not in a position to decide authoritatively what constituted such reasons of public interest, the affair would necessarily be settled on political rather than on judicial lines.

The Banca di Sconto, immediately after the publication of the Decree, filed an application for moratorium to the Tribunal: in this application it was stated that "there is no doubt that the assets of the bank greatly exceed its liabilities"; the present difficulties were attributed to the "immobilisations which compromised the regular working of the bank"—immobilisations formed as an effect of the general crisis, which the bank "hoped at first was a transitory phenomenon," but which, growing worse, affected "the industrial and commercial concerns largely financed by the bank so that they had remained paralysed and unable to meet their engagements with the bank." In concluding the

application, it was stated that the prime origin of the collapse "goes back to the programme carried out by the bank during the war period, namely, to the very generous measure in which it financed the concerns producing arms and munitions, and especially the Ansaldo Company." The application ended comically enough with the observation that "this attitude of the bank, inspired not only by its own interests but by the supreme interest of the nation, could not be imputed to it to-day as a fault." The Tribunal granted moratorium to the bank for one year, and taking advantage of the new legislation, seized the private estates of the Directors (in spite of the Banca di Sconto being a limited company) and replaced the Directors by four Judicial Commissioners, to whom was entrusted the management of the bank during the moratorium.

The suspension of the payments of the Banca di Sconto reacted gravely on every part of the national economy. The measure of these consequences and the obstacles in the way of overcoming them is reflected in the increase in the currency circulation, which took place in the last decade of the year, an increase which was made necessary by the collapse of every form of credit. The following figures refer only to the Banca d'Italia, whose circulation constitutes about seven-ninths of the total bank-note circulation :—

(*In Million Lire.*)

	20. xii. 21.	31. xii. 21.	
Home Bills discounted	3350	3911	+ 2233
Advances	2509	4181	
Notes in circulation	13536	14743	+ 1915
Debts at sight ..	846	1554	

This inflation was intended first of all to give a support to the industrial concerns of the Banca di Sconto group, which now were in want of financial help and which could not avail themselves of their deposits. But, to a great extent, it aimed at stemming the immense panic which seized the depositors of all the banks; this storm wrecked half a dozen of the minor banks and placed all the others in grave danger; for one of the large banks the danger was so threatening that the Banks of Issue formed a consortium similar to the one uselessly made for the Banca di Sconto, but with larger funds at disposal. This fact was kept secret from the public, as the result of such "assurances" had been seen, but it certainly became known in financial

circles, as was proved by the sudden change which took place in the attitude of the Bourse towards the bank referred to.

The withdrawal of foreign deposits from Italian banks must certainly have been heavy, and the exchange suffered thereby, the £ sterling going up from 91·59 on the 20th December to 98·30 on the 29th December. Much discussion has taken place as to why these effects were comparatively so slight: perhaps this is due to the fact that many foreign deposits had been withdrawn in previous months and, above all, because the banks, having foreseen the crisis and the consequent panic as inevitable, had bought foreign currency in large quantities.

The most serious reaction was felt on the Bourse. Already some days previous to the crisis the Government had forbidden Bourse contracts for the account in order to facilitate the work of the Banca di Sconto, which had succeeded by means of large purchases in holding the quotation of its own shares above the face value, this being considered essential in order to avoid an accentuation of the panic among the depositors. At the end of December the Banca di Sconto ought to have taken delivery of a quantity of its own shares amounting to more than 70 million lire; but the difficulties in which the brokers found themselves completely paralysed the Bourses, which remained closed for some days. After lengthy negotiations—and after attempts, fortunately unsuccessful, to make the Government pay up on this account as well, under the pressure of threats and of the beginnings of a strike on the part of the brokers—a consortium was formed between the banks and brokers which assumed a part of the losses, while the rest was borne by the sellers of the shares. But even so, months passed before the Bourses recovered from the blow.

The Judicial Commissioners ascertained, but only approximately, the situation of the Banca di Sconto on the 31st of December, 1921, as follows, allowance being made for losses of 173 millions accounted for as entailed during the year 1921 :—

Assets	Lire 6,137,999,650
Presumed losses and depreciations . .	,, 1,208,830,000
Balance of assets	,, 4,929,169,650
Ordinary liabilities	,, 4,242,990,320
Privileged liabilities	,, 1,673,692,123
Total liabilities	Lire 5,916,682,443

Consequently, estimating the capital and reserves of 394 millions as totally lost, there remained for the other creditors, after payment in full to privileged creditors, slightly less than 77 per cent. Beyond this, account must be taken of probable losses on about one milliard of bills rediscounted by the Issue Banks. But the Commission further observed that these calculations were subject to considerable alteration. More than three milliards of the assets consist in loans to and participation in industrial enterprises difficult to realise quickly, and of varying security: how they will turn out depends principally on the development of the industrial crisis. In this uncertain situation discussions were opened with a view to reaching a definite settlement with the creditors, whereupon began the struggle between the representatives of the various interests, of whom each was trying to grind his own axe while they only agreed in striving to make the State pay the greatest possible proportion. A violent journalistic campaign was launched on the country; a parliamentary group was founded with the special aim of defending the interests of the creditors of the Banca di Sconto; the fascisti, who had always been largely subventioned by the Banca di Sconto, got up demonstrations and meetings: the creditors went so far as to threaten that if their demands were not satisfied by the Government a "general insurrection of the creditors" would take place, entailing refusal to pay taxes, withdrawal of deposits from other competing banks, and lock-outs in the workshops. The moratorium decree issued on the spur of the moment by the Government gave no indication as to what was to take place in the later phases following on the pure and simple legalisation of the suspension of payments and on the nomination of the Judicial Commission. By the publication of this decree the Government had necessarily accepted the task of liquidating the affair, substituting itself for the creditors and for the judicial bench, every step taken by which required the support of a new governmental decree. The Government was not sufficiently strong to act in the simplest and most lawful manner, which would have been to call together the creditors and to make over to them all the assets of the Banca di Sconto, to repay themselves as best they might. In the first place, it was not possible to call together a meeting of half a million persons, such being the number of the creditors. In the second place, by attempting to wind up the affair quickly and quietly the Government had gravely violated the rights of the creditors, with the result of raising storms of protest from them. It had therefore to bribe the

creditors with concessions in order to keep them quiet. In other words, it had to assume part of the losses, the result naturally being that the creditors saw opening before them a new horizon of possibilities through blackmailing the Government and redoubled the violence of their protests. This situation lasted three months, during which two successive governments, in patent violation of the constitution, issued a series of decrees modifying the existing law—and, further, modifying each other. It was finally decreed that in the case of moratorium being granted to large banks, whose share capital was entirely lost, the settlement should be made by the Judicial Commission without calling together either shareholders or creditors. To these last was only reserved the right of protesting within ten days of publication, after which the Tribunal was to pass the sentence of ratification, with due consideration of the interests of the mass of creditors. The Judicial Commission then submitted their project for a settlement, but the Tribunal refused its sanction, as it contained certain clauses contrary to the law. The Government now threw aside all restraint, and with a special decree modified the law, and brought it into consonance with the project of settlement, which was finally sanctioned by the Tribunal on April 29th.

The settlement was reached on the following basis. To creditors owed less than 5000 lire there will be paid in ready cash, and before the expiry of 1922, at least 67 per cent. of their credits. To creditors owed more than 5000 lire there will be paid at least 62 per cent. of their credits, and of this 57 per cent. in ready money by instalments at fixed dates before March 1924, while 7 per cent. will be paid in shares of the new Banca Nazionale di Credito, which is to be founded with a capital of 250 millions to function as liquidator of the Banca di Sconto, and to carry on that bank's activities. Among the clauses of the settlement, the following, which speak for themselves, are significant. Failure to fulfil contracts arising out of the moratorium cannot lead to claims for damages against the Banca di Sconto: the Banca di Credito will reserve the right of paying up in full the liabilities of the foreign branches of the Banca di Sconto at the expense of the other creditors: the individual creditors are debarred from the right of bringing actions against former directors of the Banca di Sconto—this right is reserved exclusively to the Banca di Credito.

The auspices which surround the birth of the Banca Nazionale di Credito are indeed far from brilliant. It is decided that all the shares belonging to creditors are to be left in the hands of

a committee of fifteen creditors designated by the Issue Banks, to whom will be transferred all voting rights in respect thereof. The majority of the Board of Directors of the new bank will be required to consist of creditors of the Banca di Sconto so long as the liquidation of this bank is incomplete, even if, owing to shares changing hands or new issues of shares, the majority of shareholders should come to consist of persons other than such creditors. The main task of the Banca di Credito is thus clearly defined—namely, to pay off the creditors of the Banca di Sconto.

The task of recovering the dubious and non-liquid credits of the Banca di Sconto with industrial firms, means that the new bank will have to grant such loans to them as will ensure them from total collapse; and if this will facilitate the realisation of the former credits, it will none the less launch the new bank into relations with just such concerns as brought the Banca di Sconto to ruin. In such circumstances, will the Banca di Credito find anyone to entrust it with deposits which it will then use to pay up the liabilities of the Banca di Sconto?

There remains the part which devolves upon the State. As the non-liquid condition of the investments of the Banca di Sconto would make it impossible to pay the instalments due to creditors at the stated dates—and perhaps impossible ever to pay them in the stated proportion—the Issue Banks will advance the necessary sum at a specially favourable rate of interest, against no other security than the remaining assets of the Banca di Sconto. A decree has already been published authorising the Issue Banks to utilise for this purpose a milliard lire. In view of the very narrow margin between the sums assigned to creditors and the presumed assets, and of the very uncertain value of these last, the risks taken by the Issue Banks are very considerable. Further, the State renounces its right to the heavy taxes which should be entailed by the liquidation of the old and the establishment of the new bank, and all acts incidental to this: making thereby a present which amounts to several millions of lire.

It would not have been worth while to linger over these stories had they simply borne the character of a series of isolated and exceptional occurrences; but indeed, when allowance is made for the peculiar circumstances of the birth and development of the Banca di Sconto and of the imprudence or rather dishonesty of its leaders, the general features of these events may be regarded as broadly characteristic of the whole financial

system of Italy. The financing of industry is considered by the Italian banks as one of their principal functions: they normally grant credits even for long terms to industrial concerns, and often take over a large proportion of their share-capital and hold it until they are able to place it suitably.

For industry such a policy on the part of the banks is an absolute necessity. Owing to the scarcity of capital in the country, the general unwillingness to invest in personal property and the timidity and ignorance of many capitalists, the industries could not otherwise get the capital they need. But a danger evidently exists for the banks in having thus immobilised a large fraction of the sums entrusted to them, whereas nearly all their debts are at sight or at short notice. The difficulty cannot be solved in so simple a way as some people suggest: to affirm that the deposit banks must limit their action to the "classical banking operations," that is, mainly to the discounting of commercial paper, is to lose sight not only of the requirements of a recently formed industry, but also of the economic conditions of Italy and the close interdependence between the deposits and the loans of the banks. The first obstacle to such a solution is that the quantity of genuine commercial bills in Italy is very small, absolutely insufficient to meet the needs of the banks. This is indeed an old truth stated by Prof. Pantaleoni thirty years ago and still valid to-day.[1] The great development of commerce, which alone can give rise to an abundant flow of such bills, does not, as is well known, exist in Italy. This state of things is the result of a variety of causes, such as the preponderance of agriculture and the consequent possibility enjoyed by a large proportion of the population of supporting themselves almost without recourse to exchange; the lack of division of labour between manufacturers and traders, and above all the fact that the foreign trade, which gives rise to the largest volume of commercial bills, is financed by other countries.

Another difficulty results from the nature of the deposits. In the balance sheets of the banks the deposits are included under two different heads which, roughly speaking, correspond to two widely different categories: the first, "current account and savings deposits," includes the accounts of the very numerous small depositors who are always creditors of the bank; the other

[1] It is true that the enormous mass of Treasury Bills could temporarily remedy this deficiency; but even if the Treasury Bills were never consolidated, the liquidity of the investments of the banks would be based only on the promise of the State to issue new notes when required. And on this kind of liquidity the Italian banks can rely even at the present time.

category, "correspondent-creditor balances," is by far the more important, both as regards size (it is roughly four times greater than the former) and composition. It consists of accounts, as a rule, of considerable size which undergo great and frequent fluctuations: these are mostly the deposits of the big real customers of the bank, that is, of the group of industrial concerns which have continuous and regular intercourse with it, are financed by it and deposit with it the sums they have over and above their needs for the time being. Most of the deposits of each bank thus belong to the same group of persons and concerns to which the bank makes loans, though within this group there is a constant variation of the position of the individuals forming the group, as they from time to time become alternately debtors and creditors. Thus, in substance, a large part of the deposits constitute the common capital of a group of industrial concerns, which from time to time is placed at the disposal of one or the other of the concerns according to its needs, the result being a continual utilisation of the resources of each. In such conditions, should a bank refuse its industrial clients the loans they require, it would also lose their deposits.

Besides, the danger arising for the Italian banks from the contrast between the shortness of their debts and the non-liquidity of their credits, is, in reality, less than it seems at first sight, because they have the certainty of always being able, in case of necessity, to have recourse to that inexhaustible source of liquidity, the inflation of the currency. This way out, which, without solving the problem, carries it outside the precise territory of banking into that of currency, is certainly not satisfactory for the public, who see a risk which should naturally devolve on the creditors of the banks transformed into a danger of inflation or of increase in taxation; but, from the point of view of the safety of the deposit banks, it is, as far as liquidity goes, unimpeachable.

The greatest danger entailed in the financing of industry by the banks is to be found in the consequent close relations between bank and industry. It is natural that the bank should claim to supervise and also influence or restrain the firms to which it has entrusted its capital, for the sake of its own safety, and this is also useful to industry itself; it is also natural, but none the less harmful, that the bank should take advantage of the influence it has gained as a creditor of the firm to oblige it to carry out operations which are as disastrous for it as they are advantageous for the bank; and it often happens that a bank transfers the

losses it has suffered from bad businesses to firms controlled by it, by selling them at excessive prices goods or securities belonging to it which it is unable to sell to the public.

The large industries are stimulated on their part to make themselves independent by acquiring control of a bank so as to obtain from it, without undergoing heavy impositions, the necessary financial backing. As a result of this opposition, however, it cannot be said, generally speaking, that either of the two opposite tendencies has the absolute upper hand over the other. The general tendency seems to be towards the elimination of this opposition by the formation of large "groups" of companies of the most varied kinds concentrated round one or more banks, mutually related by the exchange of shares and by the appointment of Directors common to them. Within these "groups" the various interests are all equally subject to the interests of a few individuals who control the whole group, possessing on their own only a very few shares of the various companies. Very little is known and very little can be generalised about these groups, on account of the undetermined state of their structure, of their unofficial character, of the variety of the various groups, and of the continual shifting of the elements which compose them. What the public knows and feels—not only when disasters take place, fatal to the existence to some of them, or when hostilities break out between one group and another—is the enormous financial and political power which they have and the frequent use they make of it to influence both the foreign and home policy of the Government in favour of their own interests. Each group keeps several press organs which support its policy, and some of the accusations made against certain Ministries of being actuated by the interests not of a class, but of private concerns, and of favouring one financial group against another, have no doubt a basis of truth.

A danger not less great than the political one is the industrial danger, caused by the complete dissociation and even opposition between the interests of the individuals who exercise such power and those of the concerns they control. *Both in the "Ilva" group and the "Ansaldo" group (now both practically defunct)* there was a so-called "draining company," whose shares were all owned by the leaders of each group, and whose only function was that of absorbing the profits of its fellow-companies, dissembling these actual thefts with various financial operations.

The urgent necessity, if new disasters are to be avoided, is to get the industries again under the control of those whose interests

it is to make them prosper. But how? The shareholders, to whom this task is due by law, have proved utterly unable to carry it out. Widespread ignorance, the absence of an independent and well-informed financial press, the want of familiarity with investments in personal property, are among the origins of the situation, of which a symptom is the almost complete non-attendance of shareholders at the meetings, so much so that often the holders of a small group of shares can get possession of a company.

Some attempts have been made to remedy this state of affairs. A law was passed by Parliament more than a year ago which made compulsory the registration of the names of the holders of the shares, also with the aim of allowing public opinion to have a certain control over the mysterious activities of the financial groups; but the Government, owing to the pressure of those interested, has never put this law into execution, and now it has definitely repealed it by royal decree. At the time when the factories were occupied by the workers, the Government had solemnly bound itself to get a law passed which would allow the workmen to take part in the control of the industries: once the danger was over, the Bill, as the Minister of Labour himself said, was put to sleep. And now new laws are demanded to prevent the formation of trusts, to protect the independence of banks, to regulate the reserves to be held on banking deposits, notwithstanding that the experience of other countries has proved the impossibility of remedying such evils by legislative reforms. But even if these laws were not futile in themselves, what could be their use as long as the Government is prepared to be the first to break them so soon as it is blackmailed by a band of gunmen or a group of bold financiers?

PIERO SRAFFA

REVIEWS

Supply and Demand. By HUBERT D. HENDERSON. (Cambridge Economic Handbooks, I.) (Cambridge: University Press. London: Nisbet & Co. Pp. x + 177. Price 5*s*. net.)

"GENERALLY speaking," Mr. Keynes tells us in his preface to the whole series, "the writers of these volumes believe themselves to be orthodox members of the Cambridge School of Economics." Outsiders sometimes are inclined to look on that school as somewhat of a "sect" in the sense in which that term was applied to the Physiocrats. It is refreshing, therefore, to find that Mr. Henderson courageously throws overboard the traditional doctrine of real cost in efforts and sacrifices in favour of the modern doctrine which Davenport calls "opportunity-cost" and Ricci "equilibrium," and which has as yet received no very satisfactory name. Orthodoxy no longer insists on our accepting the curse of Adam as the basis of economics. We can happily abandon the belief that to hammer in a nail or to paint a Madonna is always a grievous effort, and that it is always a painful sacrifice for a millionaire not to keep a steam-yacht. "The real cost of anything," Mr. Henderson says, "is the curtailment of the supply of other useful things which the production of that particular thing entails." When the "real cost" of a pound of sugar is thus reduced to the honey or pepper which you might have had instead, just as the real cost of an afternoon's golf might be the afternoon in a boat which you did not take, it becomes such a shadow of its former self as to be quite innocuous.

The full implication of the new doctrine has not been quite grasped. Rejection of the traditional doctrine of real or absolute cost should carry with it rejection of the traditional theory of rent. That theory endured so long as it was held that ordinary commodities owed their value to the grievous efforts and sacrifices which attended their production. Land then appeared exceptional. When we cease to believe that the value of ordinary commodities is based on blood and tears, we have no need for a special explanation of the value of land. Here, however, Mr. Henderson tries to be conservative, and holds that land is excep-

tional because its quality varies from piece to piece and its total supply is fixed. But surely in ordinary things variation of quality is more common than uniformity. The chairs, factories, ships, and locomotives existing at any moment are of innumerable degrees of quality. Even those which were originally alike have become different owing to diverse usage and lapse of time, and it is easy to exaggerate the extent to which things are originally alike. It is said that shipbuilders cannot turn out two ships exactly equal in speed, and all of us who have tried cheap watches know that watchmakers cannot make two of them keep the same time, to say nothing of keeping the time laid down at Greenwich Observatory. And as for the supposed fixity of supply, this does not exist for land in any other sense than that in which it exists for all terrestrial matter. Labour cannot add, it is true, to the area of the globe, but neither can it add to the quantity of gold (*pace* Prof. Irving Fisher's German alchemist!). What labour *can* do is to make the existing materials accessible, and to shape them or join them together into useful instruments, and this is exactly what labour does with land, with exactly the same effect upon its value that it has on the value of "materials." The farm of civilised man is "constructed" just as truly as his house is constructed by human labour : its situation in relation to markets for its produce can be altered by human labour—the Panama Canal has almost justified the open-mindedness of the man at the wheel who asked the officer of the watch on a ship on which I was travelling whether we had to pass Cape Horn on the port or the starboard side. To say that land cannot be increased except by increase of the number of acres is like saying that the locomotive power possessed by a railway cannot be increased except by increasing the number of its engines. As a productive instrument land can be increased or diminished just like other machinery, by improvement or deterioration of its quality.

In the chapter on Capital, Mr. Henderson appears mystical. "We cannot rest content with saying that it consists of factories and machinery, and that these are essential to the worker . . . we have now to get behind the real goods to something else." This mysterious something seems to be "waiting," which is the "essential reality underlying the phenomena of capital and interest;" and "constitutes an independent factor of production, distinct from labour and nature and equally necessary." When I was quite a little boy I expended two or three weeks' money-income in the purchase of a pair of pincers with which during

a space of forty-five years I extracted innumerable nails and tacks and one wart. I am prepared to say that I saved the money with which I bought the pincers, and that the community added the pincers to its capital. I have no great objection to saying that I abstained from the immediate consumption of oranges and ginger-beer in order to invest in the pincers, but I do object most strongly to being asked to "get behind" the pincers to "waiting," and to being told, "It is this waiting which is the essential reality underlying the phenomena of capital and interest. It is really this which constitutes an independent factor of production, distinct from labour and nature, and equally necessary." To say that the community "waited" when it chose to employ itself in making a pair of pincers instead of employing itself in making several pints of ginger-beer may be only another, though worse, way of saying that it "abstained from immediate consumption," which does not, like "waited," imply that it did nothing. But to say that the abstention is an independent factor of production is highly mystical. It was with the pincers that I extracted the tacks and the wart, not with the abstention, and the pincers would have served me just as well if they had dropped at my feet from a neighbouring star. I am not at all clear what Mr. Henderson believes to have happened when I at last inadvertently buried the pincers alive in some unknown spot in the garden. My own impression is that I then lost an old and valued instrument of production, *waited* (in the ordinary sense) some time in hopes of finding it again, and during that unproductive period perforce abstained from various actions which would have added to my comfort. But Mr. Henderson, I think, would have me believe that I waited for the forty-five years during which I had the use of the pincers, and then my waiting came to an end.

The book might be improved here and there by a little meticulous criticism of the use of words. Why copy Jevons' (*Theory*, 2nd ed., p. 91) wild statement that "market" meant "originally" a "place" where things are sold? A market was "originally" a market, and not the place where, weekly or otherwise, the market was held. Haymarket and Clare Market are no doubt places, but they took their names from the markets held there. More important terms are the very elusive ones which serve for a title of the book. What do "supply" and "demand" mean? It is well to avoid the too common practice of laying down fanciful definitions of terms at the beginning of a book and then straightway forgetting all about them and

using the terms in their ordinary and usually numerous senses, but Mr. Henderson ought not to expect his readers to know without any explanation what he means by things "produced in quantities many times in excess of the demand for them," and others falling "far short of what was required" in a world in which there was no economic order (pp. 8 and 9). Later on, it is true, he does try to unravel the ambiguity of "increase of demand," but rather weakly takes refuge in "diagramese" instead of trying Sidgwick's luminous English, which is much plainer.

I wonder whether the persons who talk glibly of the law of supply and demand will be surprised to hear that there are seven laws worthy of thick type. I am inclined to boggle over the fourth of these. Can Mr. Henderson really be "reasonably sure that over a short period an increase of demand will raise the price" of an article which can be produced cheaper in large quantities than in small? If the demand for his book increases, will the price of it be raised before it is lowered? It is true that where the increase of demand is both violent and unexpected, a temporary rise of price may occur, but the normal progress of things is for increase of demand to cause the article which can be produced cheaper in large quantities to fall in price without any preliminary rise. Cost to the producer gradually diminishing as the sale gradually increases, the price falls without jumping up first.

Taken as a whole, Mr. Henderson's work deserves high praise. He has the true academic spirit which forces those who possess it to speak the truth without laying undue emphasis on things which seem to tell in favour of their own views of what ought to be. The last generation of economic teachers, revolting against the eighteenth-century glorification of the rule of a very chimerical Nature, were far too prone to insist on the defects and diseases of the existing economic organisation, and to forget that their pupils had not, like themselves, been grounded on expositions of the perfection with which it worked. Their disciples then proceeded, sometimes to the horror of their masters, to propose medicines and surgical operations for the unfortunate economic body which no one with a knowledge of its constitution and anatomy could possibly approve. Now that academic instruction in economics has become a serious thing, a new class of teacher is being evolved and the elements of the subject are being taught in the same way as those of other sciences. The volume before us is a useful contribution to the work, and if

the rest of the books in Mr. Keynes' series keep up to the standard set by it, the "Cambridge School" will be entitled to much gratitude.

EDWIN CANNAN

Money. By D. H. ROBERTSON, M.A. (Cambridge Economic Handbooks, II.) (Cambridge: University Press. London: Nisbet & Co. Pp. xii + 178. Price 5*s*.)

THE Cambridge Economic Handbooks, of which this is the second, seem likely to meet a distinct want for works of moderate compass giving, in language not unduly technical, and in a form adapted to the needs of the general reader, the main trend of modern economic research. The subject of money is a rather difficult one to treat popularly, mainly because the ordinary man perversely considers it as too dry and uninteresting for his understanding. This difficulty Mr. Robertson has well overcome. He has a gift of lucid exposition combined with a quaint humour which should make his little book a source of delight to the man in the street. *Omne tulit punctum qui miscuit utile dulci.* The parables of Mr. Eggman and Mr. Orangeman solemnly exchanging their wares through the medium of six-penny cheques (did Lombard Street and the china orange suggest the idea?), and that delicious hibernicism "the chirruping of unborn Bradbury's," are instances. Occasionally this tendency to pungent phrase-making seems to lead him too far. To describe the Quantity Theory as "a dowdy but serviceable platitude" is hardly fair to this venerable corner-stone of monetary science. No doubt in its cruder forms it may be justly accounted a truism, which a cynic might define as a truth which everyone admits, but nobody troubles to remember. But in its modern garb—as it appears, for instance, in Professor Fisher's *Purchasing Power of Money*—it is less open to this criticism. It is true that Professor Fisher connects the dependence of prices on "common money" with a more or less fixed ratio of deposits and bank reserves, which Mr. Robertson has shown to be, in the abnormal conditions of the present day, more elastic than was generally supposed. But there seems really no good reason why, in a healthy state of finance, this ratio should be more variable than, for instance, the rates of life assurance. One fancies that an insurance company, operating, if it were possible, in present-day Russia, would find a strict adherence to ordinary tables of mortality a source of disaster. And a proposition can hardly be called a truism which many

able men have been found to deny—including, it would almost seem, if I rightly understand his criticism of the "Bradbury" theory of inflation, Mr. Robertson himself. He appears to deny that the over-issue of currency notes was the immediate cause of the rise in prices, and yet on p. 159 he has to admit that the mere determination to limit the issue was a considerable factor in the fall which followed the spring of 1920. Moreover, it seems hardly correct to say that the "Bradbury" theory takes no account of the changes in demand, that is, of the changed volume of transactions. Surely the gravamen of the charge against the Government, implied if not explicitly stated, is that with a smaller volume of transactions it maintained or increased, when it might easily have restricted, the output of currency? Perhaps, after all, as Mr. Robertson says himself, it is a question of words. The ultimate cause of the rise in prices was, doubtless, the loans and Ways and Means advances, but these vicious methods of finance would not have been possible if the printing press had not been behind them. One is tempted to think that if the issue of currency notes had been left to the Bank of England, as in the '70s the issue of the *cours forcé* was left to the Bank of France, the war might have been equally well financed at less cost. Mr. Robertson appears to endorse the common impression that a fall in prices is ordinarily accompanied with discouragement to production. That this is not necessarily the case, the present reviewer has endeavoured to show in an article which appeared last November in the pages of the *Fortnightly Review*. It is true that Mr. Robertson admits that a fall in prices which is accompanied by an increase in production need not be disastrous to industry. But does not a fall in prices normally lead to an increase of demand, and therefore of production? The present troubles are due not so much to the fall in prices as to the bankruptcy of European markets. Had the latter been open as before the war the fall would have led to an enormous increase in demand. Too much attention, it would seem, is paid to the fall in prices, and too little to the equally abrupt rise which preceded it shortly after the armistice. The fall did not do very much more than equalise matters and leave prices not very greatly below the pre-armistice level. Mr. Robertson, I think, deals a little too lightly with the subject of "devaluation." The results to people with more or less fixed incomes, who have had to bear an undue share of the burden of the war, would be disastrous if it were finally determined to adopt a standard of 90 grains or thereabouts for the sovereign.

It is true that the man in the street submits with no more than a grumble "to an equivalent reduction in the commodity value of the pound." But is not that because he believes that the reduction will not be permanent, and that in time prices will approach nearer to pre-war level? The hope is probably to a great extent justified, and it is suggested that the fear that the burden of the National Debt will press unduly on posterity is somewhat exaggerated. Taxation must be regarded as a whole, and the increased weight of the debt charges will be to a considerable degree offset by the lightening of administrative expenditure resulting from reduced prices, to say nothing of lower rates of interest facilitating the ultimate conversion of the debt itself.

Mr. Robertson's chapters on the dependence of gold on its marginal cost of production, and on the exchanges seem to the reviewer to be excellent. In regard to the latter topic, he brings out a point to which sufficient attention has not been paid—that the evils of disorganised exchanges are increased by the diversion of trade from the natural channels set by economic needs to those in which an artificial advantage is reaped from currency depreciation. He is probably right, too, in blaming the bankers for their undue conservatism in regard to the proper relation between reserves and loans, though one may suspect that they were not altogether free agents in this respect.

H. H. O'Farrell

La Vérité sur notre situation financière. Par Georges Lachapelle. (Paris: Roustan, 1921. Pp. 179. 8vo. Price 10 francs.)

The title of this book makes one's mouth water. What is the true financial situation of France? How is it ascertained? Will similar methods enable us to arrive at the verity about our own financial situation, our true revenue, expenditure, liabilities and assets? Alas! The author, preaching to the converted, urges that the truth ought to be made manifest; but he does not reveal it. How can he when he complains that even the Ministry of Finance is ignorant of the national expenditure and liabilities month by month, and will only be able to clear up current amounts many years hence, if indeed it can ever straighten them out!

If M. Lachapelle does not tell us *la vérité* he tells us *quelques vérités*, which would perhaps have made a better title. Before we consider them we may observe that democracy without

knowledge is a blinded giant, and in the matter of finance is woefully uninformed. Part of the blame must be laid on the shoulders of Government. Officials, sometimes inept, always secretive, and more concerned with administrative convenience than public enlightenment, give us imperfect, obscure, and unintentionally misleading information to work upon, and it would take a committee of experts to tell us the truth about our own financial situation to-day. Even then they would have to leave much to conjecture. The outcry against secret finance has not yet become so vocal as the objection to secret diplomacy. But when the public accounts are clear, well-ordered, and complete we shall have taken an important step in reform.

M. Lachapelle offers many criticisms and suggestions which deserve serious attention. They are in the main sound and sensible, though some of them appear to pay too little attention to what is practicable. It may, for instance, be doubted whether the centralisation of Government, which has been in the bones of the French since the first Napoleon, can make way for a decentralisation from which our author, rightly or wrongly, expects more economical administration. He countenances the opinion that France ought to have raised more money by taxation during the War; but there is strong ground for believing that this was neither politically nor administratively possible while the nation was in arms and a large part of the country in German occupation. His plea for an issue of tax-free securities runs counter to the consensus of expert opinion. How far the issue to members of the French legislature of monthly statements of expenditure by each Department is worthless we will not presume to discuss, but the weekly Exchequer account published in this country is not nearly so valuable and informing as he thinks. He is in error in supposing that a Committee is appointed every year to examine the reports of the Revenue Commissioners and to make suggestions for the reform of any defects to which the reports allude. His chapters are, nevertheless, good reading for those who desire to understand the pressing difficulties of French finance. The chapters on inflation and reparation are in harmony with the opinions of most British economists. There is a copious supply of well-compiled statistics bearing especially upon the note issue and the debt, and the main lines of French finance are firmly drawn and lucidly explained. His strictures upon our "protectionist" policy with regard to German goods are severe. Criticism from such a source may come as a shock to the responsible authorities, who may have thought that it

would ingratiate us with the French to adopt this anti-German policy. The policy is bad enough in all conscience, but M. Lachapelle overrates the practical effect of our niggling "protection" up to date.

HENRY HIGGS

The Menace of Money Power. By CHARLES PERCIVAL ISAAC. (London: Jonathan Cape, 1921. Pp. xii + 294. Price 8*s.* 6*d.* net.)

THIS book is a plea for free banking, and it may without injustice be described as a tirade against the monopoly obtained by the Bank of England in the eighteenth century, and more particularly against the Bank Charter Act of 1844. Nearly all the ills from which the world has suffered since the foundation of the Bank of England, and most of those from which it is suffering at the present time, are ascribed by Mr. Isaac to the State restriction of credit. Most economists would agree with some of the author's criticisms of the Bank Charter Act, but they would point out that the Act has practically ceased to function in those directions in which it might have had the effect of restricting credit, and that the restrictions imposed upon credit by the Bank Charter Act have been counteracted by the development of the cheque system. But Mr. Isaac will have none of this. "The cheque," he says, "is centripetal, the note is centrifugal" (pp. 113, 114), and he wants what he calls centrifugal finance. What he calls centripetal finance "has substituted for gold, in place of the circulating note of even and convenient denomination and reasonable security, a non-circulating cheque of varying denomination and uncertain security. The result can be tested anywhere. The cheque is not a generally recognised claim upon real wealth. It cannot be used in the daily life of the masses for wages or for the purchase of goods. Its characteristic is not to circulate but to be sent back to the bank for clearance. The need for a circulating medium is constantly increasing, but no substitute for gold is allowed" (p. 257). "Men of productive ability," the author thinks, "are under the present system debarred from initiating new industries by the want of credit facilities" (p. 258), and "the cheque-overdraft system favours old-established industries at the expense of new ones" (p. 213). As an example of this, the failure of some of the smaller aircraft factories after the war for want of credit is adduced. The remedy for all this is

the replacement of control of finance by free competition in credit (p. 286).

If the author had followed out the implications of his own definition of credit, it is possible that he might have saved himself from a good deal of confusion on the subject. "Credit," he says, "should be synonymous with trust. An act of credit means that one person lends to another, with the trust that the loan will be returned" (p. 164), and he incidentally remarks in this connection that "the most primitive instinct in man is distrust." Mr. Isaac may not unreasonably be asked why the banker's faith in humanity should be increased if he is allowed to advance credit in the form of notes instead of in the form of overdrafts upon which cheques may be drawn? Why should the small air-craft factories (most of which were already over-capitalised) have been more likely to obtain credit from the banks if a free note issue had been substituted for the cheque system? It is certainly true that the cheque does not circulate for small payments, but the author seems to have forgotten the token currency altogether, an adequate supply of which it is always within the power of Government to maintain.

The book contains a good deal of economic history, which is strangely interpreted to show that all was well before the foundation of the Bank of England in 1694, and that since then we have gone from bad to worse, except for a time in Scotland, Ireland, and the U.S.A., when banking in those countries was comparatively free. Mr. Isaac, of course, admits that there were serious crises before 1844, and constant failures amongst the banks of issue both before and after the Act of 1826. But unsound methods of banking and other obvious causes, he thinks, had nothing to do with these; they were, according to him, due simply to the fact that banking was not completely free.

Except on his one point, Mr. Isaac's attitude is rather a negative one. He does not like the Manchester School, he does not like the Socialists. He has no use at all for Trade Unions, and not much for economists. Some of his criticisms of the economists, such as the following, are unfortunately not wholly unwarranted: "The scientists have confined themselves more and more to mere historical research, to a laborious study of economic detail and a registration of fresh doctrines. These doctrines, in so far as they have found any amount of acceptance, have originated, not with the economists proper, but with social theorists from the outside world" (pp. 25, 26). Again, it is no doubt true that the small and capable producer in England

has not the same facilities for obtaining credit as is the case in some other countries, a fact which is probably responsible for waste of ability and of valuable productive power. But it is surely possible to remove this defect by simpler and less dangerous methods than free competition in credit—perhaps through an extension of co-operative banking.

H. SANDERSON FURNISS

Essays in Taxation. By EDWIN R. A. SELIGMAN, McVickar Professor of Political Economy in Columbia University. Ninth Edition, completely revised and enlarged. (The Macmillan Company. 1921. Pp. xi + 806.)

THIS is the ninth edition of a work first published in 1895, and it is described on the title-page as "completely revised and enlarged." Enlarged it certainly is, but the claim to complete revision, although reasserted in the Preface by a declaration that the various chapters have been brought "down to date," seems to rest for the most part on occasional slight footnotes. It may disconcert a British taxpayer to read that "it is everywhere conceded that England is on the brink of a still greater expenditure," until he gathers from the context that Professor Seligman is only forecasting, from the standpoint of 1913, the drift of the social legislation of the Asquith Government and of the naval competition with Germany. The section headed "The British Land Taxes" still stands, with passages like the following:—

"A good beginning has been made in the process of valuation, although it will take some years before it is completed. The new taxes are expected ultimately to yield a substantial revenue; some competent authorities estimate it as likely to amount, at the present rate, to between five and six million sterling annually."

After a full eight pages in this vein, it may be doubted whether a footnote intimating that "all further attempts to proceed with the valuation of land and to enforce the laws were discontinued in 1920" is enough to guard an American student against serious misapprehensions. Some other sections have an even more archaic air. It would be unreasonable, of course, in a work of this size to look for the very extensive rewriting that would be required for a really adequate revision; but if

Professor Seligman had done no more than cut out dead matter, this edition would have been much more serviceable and, incidentally, much shorter.

The enlargement is due to the addition of five new chapters, of which two are concerned with the American problem of devising a satisfactory substitute for the discredited General Property Tax as a source of State, as distinct from Federal, revenue. Here Professor Seligman avows himself a convert to the policy of a State income-tax "supplementary, and as far as possible conformable, to the federal income-tax," and he argues a complex case in a very lucid and convincing way. The remaining chapters deal with the general problems of war finance, and will be of more interest to British readers. On the familiar issue of loans versus taxes Professor Seligman takes a middle path, which leads him to defend the policies pursued by the British and American Governments as about the wisest possible. The purists who would have financed the war mainly out of taxes usually argue that this would not only have been practicable, but that it would not have meant a materially greater burden during the war period itself, since the munitions and war supplies had all to be produced then and the real costs of the war were accordingly incurred (for the most part) at the time. Professor Seligman does not dispute the substantial truth of this contention, so far as what he calls the *objective* costs of the war are concerned. But he retorts that *subjective* costs are at least half the problem, and that the loan method served in part to diminish and in part to transfer to the future the subjective costs of the war. Some individuals were able to lend to the Government without difficulty a much larger proportion of their incomes than could have been obtained from others, equally well to do, without dislocation to business or some really serious injury. No system of taxation could be adapted to meet such varieties of individual circumstance; and, accordingly, to have substituted taxation for loans would have been to redistribute the immediate objective burden in a manner which would have represented a much greater loss of immediate utility. Further, in an economic world based upon credit, no one regards a loan as constituting nearly as great a present sacrifice as an equivalent tax; and the difference is certainly not compensated by the greater prospects of taxation in the future which the use of the loan method entails. Accordingly, in so far as the individual would have paid in taxes the same sums as he actually subscribed to loans, not merely would

he have become more disgruntled, but his productive efficiency might thereby have been impaired.

For these and similar reasons Professor Seligman considers that war taxation was carried about as far in the United States and Britain as was prudent. At the same time he is fully alive to the serious reactions of the loan policy on the future, and he does not consider that most of the Continental Governments taxed enough. Moreover, in the matter of the particular taxes chosen, the Anglo-Saxon communities are further commended for their greater reliance upon direct as compared with indirect taxation. "It thus appears that the United States succeeded even better than Great Britain in carrying through a democratic fiscal program in the war; and that the Anglo-Saxon countries disclose a very decided contrast to all the other belligerents. The consequences are apparent in the relatively more favourable situation in which Great Britain and the United States found themselves when confronting the problems of post-bellum finance." The conclusion is somewhat complacent; but, in the main, Professor Seligman's handling of these topics is distinguished by a union of sound analysis and good sensible judgment, which makes him refreshing and instructive to read.

H. D. HENDERSON

The Problem of Estimation: A Seventeenth-Century Controversy and its bearing on modern statistical questions, especially index-numbers. By CORREA MOYLAN WALSH. (P. S. King & Son, Ltd. Pp. 144. Price 6s.)

THE controversy between Galileo and Nozzolini, which forms the introduction to Mr. Walsh's book, not only states the essential problem to be discussed, but also sets the tone and spirit of his exposition. The detailed arguments, cast always in the form of personal challenge and invective, read like a brief rather than a treatise. Yet after accusing Dr. Bowley of obscurantism, Prof. Edgeworth of irrelevance and Jevons himself of evasion, Mr. Walsh has to admit that his own best formula for measuring a change in the price level—the geometric mean between the arithmetic average of the price-variations with the weighting of the first period and the harmonic average with the weighting of the second[1]—is only approximative. Indeed he confesses that

[1] The ratio of the price levels at two periods $\frac{P_2}{P_1} = \sqrt{\frac{\Sigma q_1 p_2}{\Sigma q_1 p_1} \cdot \frac{\Sigma q_2 p_2}{\Sigma q_2 p_1}}$ where p_1, q_1, p_2, q_2 are the prices and quantities in the first and second periods respectively.

the problem of axiometry may after all be insoluble with perfect precision, even when all the prices and the quantities are exactly known at both periods. Economists need not, therefore, be utterly ashamed of the negligence imputed to them. Only lunatics continue to work out the value of π in the hope of squaring the circle. At the same time the logical defence of this formula, built out of the shattered remains of many others, is always interesting and often diverting. There has been much muddled thinking about this problem for which Mr. Walsh has now put an end to all excuses.

With the details of the data Mr. Walsh has no concern. Whatever be the *quæsita* of an index-number, he insists that there can only be one theoretically right way of averaging price-variations. In this he pushes his quarrel with Prof. Edgeworth too far. It is conceivable that a series of prices might be selected as an index of something essentially different from "the purchasing power of money brought into relation with the data"—wherever, for instance, the prices partake of the nature of a measurement rather than of an estimate and are to be averaged, as it were, for their own sakes. The recent experiences in trade boom and depression have shown how vast is the psychological influence of a change in individual price quotations. Nothing would persuade a business man that he is better off during a collapse of prices if the price of the commodity in which he is interested is merely falling more slowly than the rest.

But the most powerful, because the most general, accusation in the whole work (though made specifically only in the last paragraph) is that implied in its form. It is inconceivable that a technical treatise on physics or chemistry or even biology or genetics would be written in the same style as a seventeenth-century controversy on the subject. Economists can find material for accurate scientific investigation only in the domain of price and monetary problems; yet they have not even come to an agreement about the tools which can justifiably be used. Mr. Walsh shows how painfully immature the study of economics is when judged by the standards of exact science. It would be unfortunate if this lucid and convincing thesis should lose its force owing to the very violence with which it is stated.

But when all is said about the theory of averaging—and unlike his champion Galileo, Mr. Walsh will certainly have the last word—the hopeless inadequacy of the data obtainable still remains by far the greatest stumbling-block in the way of the axiometrist. When price quotations can be relied upon to err

from the truth by not more than 1 per cent. instead of 10 per cent., and weightings to bear any sort of demonstrable relation to reality, it will be time to use Mr. Walsh's formula. Till then the congruence which now exists between such diversely constructed indices as those published by *The Times* and the Board of Trade will soothe the consciences which Mr. Walsh so violently disturbs.

A. J. BEAMISH

Tariffs: A Study in Method. By T. E. G. GREGORY, B.Sc. (Econ.) Lond. (London: Charles Griffin & Co., 1921. Pp. 499. Price 25s.)

THIS book, as its title indicates, is concerned, not with fundamental questions of the merits or demerits of Free Trade or Protection, but with the very numerous technical questions which arise in the construction and operation of tariffs. Its interest and value, therefore, are more for the student of public administration and for the man who wishes "to see how it is done," than for the economic theorist. But even the economist, in the narrower sense of the word, will find much to interest him in this book. For example, the discussion in Chapter V of the different effects of specific and *ad valorem* duties under rising and falling prices; the survey of the anti-dumping measures recently taken in a number of countries; the analysis of varying methods of mitigating the effects of a protectionist *régime* by means of the "improvement trade," by compensatory exports and imports, and by drawbacks on exports; and, finally, the instructive chapter on Commercial and Tariff Treaties, dealing mainly with the working of the Most Favoured Nation Clause. Mention should also be made of Appendix II on the Tariff as a revenue instrument. But even in regard to most of these questions the author is interested primarily in the technique of tariff-making and he is content to refer the reader to other authorities for views on the economic issues involved. It speaks a good deal for the impartial way in which the subject is treated that the author never discloses what are his own views on the deeper issues involved, while the only general conclusions on the matters which fall strictly within the scope of his work are contained, oddly enough, in the Preface, and are of a very guarded nature. Dr. Gregory draws his illustrations of the various methods employed in the construction and working of tariffs, from

the practice of many different countries, and in some, though not in all cases, gives a general survey of the extent to which particular methods are adopted in many of the chief countries. In view of his general summing-up against *ad valorem* and in favour of specific duties, it would have been of interest if he could have stated the extent to which either of these methods is used in the case of different countries, and their relative importance in the tariff system of countries adopting both methods. In general it would have added materially to the value of the work if rather more attention had been paid to the quantitative aspects of the subject.

Perhaps the chief impression left by a perusal of this book is that of the extreme complexity of the problems involved in tariff-making—*e.g.* rate-framing, systems of classification, valuation questions, and many others. Even when a Government has decided what policy it shall pursue and which interests it desires to protect, the practical application of its policy teems with difficulties of a formidable nature, many of which, as the author shows, are not susceptible of a completely satisfactory solution. It is an interesting commentary upon the simplicity of the pre-war tariff system of this country, that this is the first book of British origin to deal with the technical side of tariff-making in a comprehensive manner, though it is strange that the need for such a book should not have been apparent during the Tariff controversy. Dr. Gregory is to be congratulated on the successful manner in which he has, throughout his work, ordered the enormous and unwieldly mass of information with which he has had to deal, and brought it within the limits of a scientific system of classification. There can surely be few people who would have approached the task undertaken by the author without feeling that they were being subjected to a truly Gilbertian form of punishment. By the time, however, that the present reviewer had finished the book he felt in need of some of the sympathy which he had previously extended to the author; for although it is hardly to be expected from the nature of the subject that it should be light reading, yet that it should be as difficult and laborious to read as is in fact the case, seems to indicate a certain defect in exposition. The style is by no means free from obscurity, and at times a certain contagion seems to have spread to it from the numerous excerpts from official texts of laws cited here. Some of the paragraphs and sections of laws taken out of their context are most obscure, and the author rarely comes to the aid of the

reader with an explanatory comment. We confess to having been completely baffled by the following passage on page 355: "*Time of Importation.*—A very full definition is given in the U.K. C.C.A., § 40—'such time shall be deemed to be the time at which the ship importing such goods actually came within the limits of the port at which such ship shall in one course be reported and such goods be discharged,' *but*, by the Finance Act of 1901 (1 Edw. VII., c. 7) § 7 (2)—'As respects the first levying or repealing of any duty of customs (including any duty imposed by this Act) the time at which the importation of any goods shall be deemed to have had effect shall be the time at which the entry of the goods under the Customs Act is delivered instead of the time mentioned in § 40 of the Customs Consolidation Act, 1876.'" Again, the pages devoted to the tariff system of the French Colonial Empire leave the uninstructed reader in a state of fog as to the precise nature of the system prevailing, which is specially unfortunate in this particular case owing to its great political importance.

The task of the reader is not facilitated by the considerable number of misprints (the reviewer noticed at least thirty), some of which were quite minor errors overlooked in proof-reading, while others were clerical errors sometimes affecting the whole meaning of a sentence or paragraph. For example, on page 69, line 5, "bi-linear" should read "bi-lateral"; on page 175, line 22, "infra marginal" should read "supra-marginal"; on page 176, line 20, "minus" should read "plus"; on page 451, line 26, "Non-Reciprocal" should read "Reciprocal."

The defects to which attention has been drawn do not, however, weigh heavily in the balance when compared with the gratitude owing to Dr. Gregory for such a very thorough and painstaking piece of work on a subject which has hitherto been left severely alone by British writers, though its importance for this country has been greatly accentuated as a result of the war. It would be a real gain if Members of Parliament and others could be induced to submit themselves to the severe mental discipline of ploughing their way through the pages of this book, and thus obtain a fair conception of the administrative problems involved in a tariff system.

C. W. GUILLEBAUD

Le Prélèvement extraordinaire sur le capital dans l'Empire allemand. By VICTOR BADULESCO. (Paris: Marcel Girard. Pp. 513.)

THIS substantial volume is divided into three parts: (1) The Capital Levy in German legislation and theory down to 1919; (2) The political, economic and financial situation of Germany; and (3) The laws of December 31, 1919, December 22, 1920, and July 6, 1921. The text of the laws is printed in an appendix.

Book II of Part I contains a long and careful account of the economic arguments advanced for and against a capital levy in Germany between the years 1914 and 1919. In spite of expectations of an indemnity, the question appears to have become one of public debate considerably earlier than it did in this country. The existence of the Wehrbeitrag precedent was, no doubt, partly responsible for this. The arguments used on both sides were very similar to those that, towards the end of the war, made their appearance in this JOURNAL and elsewhere. There was even, in veiled form, the famous argument of the rich man among the Penguins: "O Mael, O mon père, j'estime qu'il est juste que chacun contribue aux dépenses publiques et aux frais de l'Eglise. Pour ce qui est de moi je suis prêt à me dépouiller de tout ce que je possède, dans l'entérêt de mes frères pengouins, et, s'il le fallait, je donnerais de grand cœur jusqu'à ma chemise. Tous les anciens du peuple sont disposés, comme moi, à faire le sacrifice de leurs biens; et l'on ne saurait douter de leur dévouement absolu au pays et à la religion. Il faut donc considérer uniquement l'intérêt public et faire ce qu'il commande. Or ce qu'il commande, O mon père, ce qu'il exige, c'est de ne pas beaucoup demander à ceux qui possèdent beaucoup; *car alors les riches seraient moins riches et les pauvres plus pauvres. Les pauvres vivent du bien des riches; c'est pourquoi ce bien est sacré.*" M. Badulesco groups these arguments together in four chapters as financial arguments, economic arguments, considerations of justice and technical considerations. He summarises the general impression to be gathered from them thus: "As we have seen, when account is taken of the real conditions of economic life, of the diversity of individual fortunes and situations, the levy on capital—as public opinion conceives it—loses, in actual realisation, a part of what, at first sight, constituted its true attraction. Immediate payment in cash is limited; annuities, sometimes of long term, become necessary; certain fortunes can only meet the levy under the form of a renew-

able tax, others, though important, escape; the results of an extraordinary levy on capital are thus much diminished. . . . We are brought to conclude that the question of the advantages and disadvantages of an extraordinary levy on capital does not lend itself to a general solution *à priori:* it can only be resolved in particular cases, account being taken at once of the economic, political and social conditions of the country under review and of the fiscal needs which the system of taxes is called upon to satisfy" (pp. 151 and 155). In this connection it is important to observe that, whereas in England the object sought by advocates of a capital levy is the liquidation of a large part of the internal debt, in Germany, with an unbalanced budget and the heavy reparations burden, such liquidation is not now a practicable ideal.

In the various capital levy laws as actually passed by the Reichstag it is only possible here to mention one or two points of special interest. (1) In the Wehrbeitrag of 1913 there was an arrangement for taxing income derived from work, to balance, in some degree, the tax on capital; there is no corresponding arrangement in the post-war laws. (2) The first of these laws, that of December 1919, made such free provision for postponing payments that only a very small proportion of its total yield would have accrued in the near future; but the Amending law of 1920 forbade postponement for more than a short time except in very special cases. (3) The German capital levy is assessed, not merely on physical, but also on moral (or fictitious) persons. Universities, churches and certain other bodies are exempted. But joint stock companies are subjected to the levy directly and not merely through their shareholders, complicated provisions being introduced to prevent this arrangement from involving double taxation. The levy on moral persons is, of course, at a fixed rate, and not, like that on physical persons, progressive. (4) Furniture and household goods are exempted from the levy, and a rebate up to 100,000 marks is allowed to people who have lost these things through the war and have not replaced them by a day fixed by the law. Special treatment is also accorded to objects of art and jewellery, a distinction being made between those that had come into their owner's possession before and after 1914. (5) Abatements are allowed in certain conditions to persons below a named standard of fortune if they are over 45 years of age, and larger abatements if they are over 60 years of age. (6) The valuation of fortunes is based on declarations made by the owners and controlled in various ways; and,

moreover, the first valuation is treated as provisional, so that errors discovered within three years may be rectified.

No large sum of money was received under these laws, now apparently abandoned, and there has been little opportunity to draw lessons from a study of their practical working. The collapse of the internal value of the mark since the date of the valuation upset the calculations alike of their advocates and of their opponents. None the less, M. Badulesco's volume will prove an essential part of the equipment of students of this subject. That he is not obsessed by technicalities to the exclusion of wider considerations is well shown by his prefatory remark : " Une réforme fiscale—comme toute mesure sociale—doit compter avec l'opinion publique, et, quels que soient ses mérites, elle échouera si l'opinion lui est hostile ; il importe peu, dans ce cas, que les griefs formulés soient fondés ou non, car rien ne saurait donner plus de force à une erreur que de la mettre au service des intérêts personnels " (p. ix).

A. C. Pigou

War and National Finance. By the Hon. R. H. Brand. (London : Arnold, 1921.)

This is a collection of articles written for *The Round Table* between the years 1912 and 1920. Not every writer on current events in a popular periodical could stand the test of being confronted with what he wrote ten years ago. But there is no discrepancy between Mr. Brand's earlier and later articles. His foresight and insight before and at the beginning of the war lend authority to the opinions and advice which he offers with respect to post-war problems. Long before the war, in March 1912, he warned this country and the Dominions that a nation, "even the most up-to-date and reasonable nation "—even Australia or Canada—might be called on to fight for its liberties and its place in the world. Finance does not make war impossible. So long as deep national differences persist, so long there is a danger that they may clash in their effort to live and expand." In December 1914 the prophetic author disputed the comforting idea that our opponents would very soon be forced by financial exhaustion to make peace. He recalls the example of revolutionary France not deterred by wretched finances from conquering Europe. We might add the example of the Prussians under Frederick the Great, who, according to Macaulay, was determined to fight on as long as there was rye-

bread and potatoes, lead and gunpowder. The "psychological element," as Mr. Brand says, the temper of the people, is more important than finance. Another instance of Mr. Brand's foresight is his prediction in 1914 that though "immediately after the war there may be a short period of seeming prosperity, a small boom for a year or two, yet there must inevitably then be a more or less prolonged period of stagnation and depression while each country is building up its reserves of capital."

The whole tenor of the writings before and during the war appears to evince a remarkable sagacity, compounded of common sense and expert knowledge, which disposes us to defer to the writer's judgment on matters of present practical importance, when we have not the opportunity of forming an opinion from first-hand data. We refer especially to facts and inferences which may be described as "economic consequences of the Peace." The views which a more brilliant writer has expressed under that title derive confirmation from our author's independent sober judgment. Mr. Brand describes himself as in general agreement with Mr. Keynes, though disagreeing with some views about foreign Governments which he attributes to Mr. Keynes. If there is a difference between the two writers in political views, as there certainly is in literary style, such difference does not destroy, but rather confirms, the impression which is produced by their agreement concerning economic conditions. They agree as to the terrible consequences of the war to continental Europe. Mr. Brand, indeed, adds one touch which perhaps his financial experience brought under his notice. The small nations which had just come into existence clamoured for credit in order to buy more high explosive and machine guns, wherewith to destroy each other, rather than for the restoration of industry. Nor were the great nations less blind in their hatreds. "Nothing was more depressing to anyone who spent some months in Paris during the spring (of 1919) than the complete absence of any generous or even sane outlook on future international relations." Like Mr. Keynes, Mr. Brand recommends moderation in the exaction of reparations. "If we take away from her (Germany) all her liquid assets and all her working capital; if, furthermore, she is bound in future to make yearly payments to an amount which will in any reasonable human expectation exceed her capacity, then no one outside a lunatic asylum will lend her money or credit, and she will not recover sufficiently to pay anything." On the question whether, under the head of damage to civilians, we can include the consequences

of German soldiers killing or wounding our soldiers, the cost of pensions, Mr. Brand declares that "this meaning cannot, in our opinion, honourably be read into the words we used" (at Versailles, November 1918).

We have dwelt especially on points which concern all classes of readers. There are other parts of the book which will interest the general reader more than the trained economist, descriptions of the Foreign Exchanges, the nature of Public Loans, and other aspects of "Lombard Street." But even the trained economist, if his training has been mainly academic, may learn something from the restatement of familiar truths by one who is conversant with their application in practice.

F. Y. Edgeworth

The Acquisitive Society. By R. H. Tawney. (London: G. Bell & Sons, Ltd. Price 4s. 6d. net.)

Before Mr. Tawney, the reviewer stands at gaze. It is as impossible to quarrel with him as it is with a child or a prophet. He is as much beyond criticism as a *gloire de Dijon.* He speaks with enthusiasm and not as the economists. He is one of a long line of dreamers of dreams that began with Plato and will only end when the world ends. If and when he understands that there is only one task of which it can be stated definitely that it is easier to perform it than to criticise society as it has been, is now, and always will be, he will write a bigger, wider, better, and more influential book than *The Acquisitive Society.* That task is shelling peas.

The Acquisitive Society is an expansion of the author's *The Sickness of an Acquisitive Society.* The relation between them is as follows:—The latter was published by the Fabian Society in paper covers at 1s. net. It has been expanded by about one-third in length—the additions adding, as I think, nothing to the substance and little to the value of the original—put into cloth boards, and published at 4s. 6d. net. I have no data for deciding whether the change is a sample of the sickness or of the acquisitiveness of society.

There is a naïve simplicity about Mr. Tawney. He imagines earthquakes and makes pills to cure them with a facility truly delightful. Society is all wrong because it is "acquisitive," that is to say, individuals in it carry on their daily work in order to acquire an income; and they are able to do this because the law recognises that each of them has rights and enforces these

rights against those who infringe them. Society is organised on a basis of rights and should be organised on the basis of functions. Not what a man owns should determine his income, his status, and his influence, but what he does. Industry should be organised to render services and not to reap profits.

Because it is organised solely in order to reap profits, the direst results follow, according to Mr. Tawney. On its economic side, society is sick even unto death. Proof? Simplicity itself. Everybody agrees that what is needed at the present time is increased output, and yet society cannot get it because the workman who refuses to recognise the moral rightness of the present economic system refuses to be a consenting party to the higher output which society must have or perish.

This is the earthquake which is to shatter society as we know it. Mr. Tawney is ready with his pill. Two things have to be done: the first is to kill off all shareholders; the second is to organise every industry as a profession.

The shareholder is, according to Mr. Tawney, the noxious germ which is killing society. He corresponds to the dead hand of the mediæval Church, and a new Statute of Mortmain is needed to get rid of it. Take a typical case. Here is one. John William Biggs, born to clogs in a Lancashire spinning town. Having brains and application far above his fellows, he saves money, and in time becomes a master spinner, owning a mill containing 40,000 spindles worth 30s. apiece, employing 800 work-people. The mill and all that therein is is property, but it is not functionless property, since the owner, in return for being guaranteed his property rights by the society in which he lives, performs the function of running a mill and keeping 800 hands and their dependents in work and wages year in and year out. But John William, like the rest of us, grows old. He has made all he wants to make. So he turns his mill into a Limited Liability Company, sells it to the new Company for half a million in £1 shares, and retires to St. Anne's-on-Sea to die in grace and peace. From the very moment he becomes a shareholder, he also becomes, in Mr. Tawney's view, a parasite on society, an evil-minded person who reaps where he has not sown. When he dies and leaves his shares to his son, that son, again according to Mr. Tawney, is a person who is outside the pale, and should be economically pole-axed forthwith. Why? Because so long as industry is organised merely to provide profits for shareholders it cannot be organised to provide service for the community.

Mr. Tawney, then, would have the shareholder eliminated, and along with him would go the mere "business" man, the financier, the company promoter, the organiser of trusts and monopolies. This would leave behind the only classes who, according to Mr. Tawney, have not only a legal and economic but also a moral right to their incomes. These are—(1) the professional and technically qualified managers of industry, those who are familiar with the productive processes and the scientific and mechanical equipment with which they are carried on; and (2) the workers. These are to organise industry somehow - how not stated—so wondrously that all waste will be eliminated, all workers completely satisfied so that they work with the highest efficiency, and all consumers perfectly satisfied. It is all done, one observes, by eliminating two classes, those who provide the capital and those who conquer the markets. Future capital would, one gathers, be set aside by the governing body of each industry from the gross amount realised by the sales of the products of the entire industry. As for future markets, we hear nothing at all of them: with the shareholder dead and gone, and every industry organised as a profession, consumers would apparently be so delighted that the markets would be formed by a process of spontaneous generation.

The fact of the matter is that Mr. Tawney is absolutely right in what he aims at, and entirely wrong in the reasons he gives for aiming at it and the methods by which he would approach his object. I entirely agree with him when he says that the position of the worker in every industry should be stabilised so as to approach the Civil Service in the certainty and continuity of its reward. I share his view that the worker should be engaged not for a day or a week at most, but for life, though I add the proviso, omitted by Mr. Tawney, that his claim to a continuous income, whether the employer had at any particular moment a job to give him or not, should not be an absolute right, but should be dependent on his worth.

There is one blameworthy feature of what is on the whole a noble book. The writer's passion leads him to definite distortions, and occasionally the atmosphere of the book is, at any rate to my mind, frankly noxious. For example, Mr. Tawney writes: "A mill-owner may poison or mangle a generation of operatives; but his brother magistrates will let him off with a caution or a nominal fine to mangle the next. For he is an owner of property." If these words are to be construed strictly, they are wrong as applied to any period known to me, but Mr.

Tawney writes as if they were wholly true of to-day, and that is an unpardonable delusion.

GEORGE W. GOUGH

Labour in Transition: A Survey of British Industrial History since 1914. By WILLIAM AYLOTT ORTON, M.A. (Cantab.), M.Sc. (London). (London: Philip Allan & Co., 1921. Pp. xxiv + 286.)

The Frontier of Control: A Study of British Workshop Politics. By CARTER L. GOODRICH. With a Foreword by R. H. TAWNEY. (London: G. Bell & Sons, Ltd., 1920. Pp. xvi + 277. Price 7*s.* 6*d.* net.)

THE subjects of these two books, both the wider one of the position of labour, and the narrower one of the nature and meaning of control, have produced much, and often embittered, controversy. Indeed, there has been some danger that the real and vital facts would be overlaid, and overlooked, owing to the arguments and theorising that they have called forth. It was most necessary, therefore, that the matter should be dealt with, both historically, as is done by Mr. Orton, and critically by Mr. Goodrich, in a serious attempt to elucidate the facts. And this is the chief of the many merits of these books. Both are excellent in style and matter and deal thoroughly and fairly with their subjects; but their scientific treatment is their greatest virtue. It may be added that a brief but most suggestive introduction to Mr. Goodrich's book is provided by Mr. Tawney, who shows a gift for succinctly epitomising the facts and tendencies which Mr. Orton and Mr. Goodrich set out in detail.

Mr. Orton's task, which amounted to an attempt to trace the history of labour since the outbreak of the Great War, was necessarily difficult. Not only is much of the information fragmentary and hard to piece together, but the war itself brought a great confusion in, and alteration of, standpoints. There is, further, the very real difference in the meaning to be attached to control. The mass of working-class feeling itself is a tangle of varying, often conflicting, ideas; and while, before the war, "strictly within the lower and broader stages (of society), there has been growing up for near a century a sullen 'class-consciousness' founded for what it was worth almost entirely on a community of economic disabilities," this as yet had no clear and definite expression. With the war, a more definite formulation

began with the shop stewards and the movement for workers' control; whilst, along with this, and not necessarily in conformity with it, the Trade Union movement was seeking to retain and extend its existing privileges. It is no small achievement of Mr. Orton to have brought the thread of his narrative so clearly through the tangle of war and post-war years; and the coolness of his judgment is commendable. He is never afraid to criticise, and yet his criticisms are always well-balanced. His work, too, is very readable.

It must be sufficient to refer to a few more salient points. To begin with, he sets out clearly the real danger and difficulty during the war in the position of the skilled workman, "among whom what skill at lathe or forge or loom a man had gained was his one precious possession, to be protected against exploitation as a richer man might guard his jewels against the thief." In this lay the real problem of dilution, and it is well that the matter should be emphasised. Unfortunately, the attitude adopted at an early stage in the war was calculated to increase rather than to diminish the fear of change. Mr. Orton analyses the possible means of increasing the supply of munitions. It is significant that the first attempt appears to have been on lines which endangered the position of the artisan, and yet were less promising than the policy of extending contracts among firms not hitherto engaged on munitions, which was comparatively neglected, or at least received less attention. It is probable, indeed, that suspicions thus engendered during the spring of 1914 had intensified the subsequent difficulties of the dilution scheme. One point that perhaps Mr. Orton might have emphasised more than he has done is the very special way in which the trades represented by the A.S.E. were threatened; for this goes far to account for any special difficulties that arose with them.

Moreover, Mr. Orton brings out admirably the psychological element in the problem. To reach a settlement with the Trade Union leaders, better informed of the national position and of the safeguards provided, was one thing. The real test came when the agreed changes were applied in the individual workshops. On this Mr. Tawney says: "The condition of carrying out the reorganisation effectively was the consent of all engaged in the industry. . . . When, as in the textile trades, that representative machinery worked effectively the emergency was met with comparatively little difficulty. When, as in the engineering trades, the policy was to force drastic innovations upon workers who were not consulted with regard to them, the result was endless

friction." It may be added that, as regards this last point, Mr. Orton's view of the dilution policy in engineering seems appreciably less severe.

Mr. Orton is fully alive to the less desirable elements in the Labour movement, and sets out clearly the growth of revolutionary or anti-patriotic elements or ideas. His concluding chapter is most interesting, and should be carefully studied. It shows a clear perception of the difficulties of immediate extensions of workers' control, and rests its hopes rather in a movement "slowly broadening down from precedent to precedent."

Mr. Goodrich set himself narrower limits, namely, to investigate the meaning of control, to explain why it is demanded, and to attempt to discover exactly how much of it exists; or, in Mr. Tawney's very apt words, "we must know exactly how much control is wanted, and control over what, and through whom it is to be exercised." The work requires in some ways different qualities from that of Mr. Orton. For it is primarily critical and analytical, whilst *Labour in Transition* is more historical and descriptive. Again, to quote Mr. Tawney: "Mr. Goodrich brings the wide background of a student of economics, and a dash of charming scepticism, which to one heated by the somewhat feverish temperature of British industry during the last two years is as refreshing as the ice at the close of an American dinner." He has also an admirable sense of humour and is fully alive to the lighter incidents of the struggle for control.

Perhaps the best parts of the book are the opening and closing chapters. The first analyses admirably the meaning of the demand for control. Mr. Goodrich throughout aims rather at stating facts than at arguing on principles. In the closing chapter, however, he attempts to lay down what control means in order to be able to give some estimate as to how far it has gone, and distinguishes between "positive" and "negative," "customary" and "contagious," "agreeable" and "enforced," "dependent" and "independent," control. The last term means control taken or enforced as a right, not received as a gift, where the workers' side "does actually exert an independent force." This, he considers, "seems . . . the broadest sense in which the term 'control' can be used with any significance."

In the intervening chapters the author deals subject by subject with the different branches of workshop life, and shows how they have been affected by the movement for control. He excluded deliberately such questions of wages and hours as belong primarily to ordinary Trade Union policy, as not coming rightly within the

special problem. These chapters, too, are excellent, though certain criticisms of detail are possible. For instance, the work of Trade Unions in finding places for their members seems to be underestimated. But these, after all, are small points. They detract little from the value of the work.

N. B. DEARLE

Insurance against Unemployment, with Special Reference to British and American Conditions. By JOSEPH L. COHEN, B.A. (Cantab.), M.A. (Columbia, U.S.A.), "Richard Watson Gilder" Fellow in Economics (Columbia). (London: P. S. King & Son, 1921.)

INSURANCE as a means of mitigating the loss caused by natural contingencies—death, sickness, fire, shipwreck—has long been known and practised among civilised peoples. Insurances against losses which are only partially the work of nature, and are largely caused by human institutions and circumstances, are a more recent development. Unemployment, for which Mr. Cohen offers the following as a definition, "A workman is unemployed when he is able-bodied, efficient and, though willing to work in his own trade at the current rate of pay, is unable to find employment because of lack of work," is such a mixed event. An instance of insurance against unemployment that arises from natural causes is given by the Friendly Societies of House-painters. Their employment only lasts for part of the year and is necessarily suspended during the winter, when they will be reduced to distress unless they have some other and supplemental employment for that season. This risk they provide against by contributing to a common fund during the part of the year in which their work is continuous and well paid. Apart from these occupational societies, Friendly Societies often make grants to members while out of work. They cannot offer to such members a definite insurance, as they do to members while sick, for the risk is not one capable of such estimation beforehand as would justify the entering into a definite contract to make it in respect of an agreed contribution to an adequate fund for that purpose.

The Trade Unions were more favourably situated. Having to do with a single trade, with the ups and downs of which they were familiar, they could insure out-of-work pay under better conditions than were open to the Friendly Societies; but they

would not consent to do so in a scientific manner. The necessary division and appropriation of funds among the various objects of insurance did not commend itself to them. The whole of their resources must be ready to be applied, whenever necessary, to the prime object of the Union—the carrying on of industrial warfare. On the average the amounts paid in out-of-work benefit have been from 20 to 30 per cent. of all the benefits paid by the Union, including sick pay, superannuation pay, and dispute pay.

The genius of Mr. Lloyd George devised a plan for carrying on unemployment insurance on the lines of his comprehensive National Health Insurance, and the Act of 1911 in Part II contains provision for an experimental and limited scheme with that object. This was wise; for, as the late Mr. Ackland remarked, "no data were available which would enable the rate of unemployment to be deduced on what might be considered an actuarial basis." Accordingly, Part II of the Act of 1911 applied compulsory unemployment insurance to seven selected trades only: "building, construction of works, shipbuilding, engineering, construction of vehicles, ironfounding, and saw-milling." It contemplated the inclusion of other trades, but only upon their own application to share in the benefits of the scheme. As the late Mr. Bailward, however, shrewdly observed, "English experience shows clearly that there is no halfway house. If the principle of compulsion is once accepted in certain trades, it must eventually be extended to all. He was a true prophet, though he did not live to see his prophecy fulfilled. In 1920 the compulsory insurance was extended to all employed persons (with some specified exceptions, and to these it may be extended by an order of the Minister of Labour). The result is, that while the number of employed contributors under the Act of 1911 had varied between 2 and 3 millions, with a tendency to increase, under the Act of 1920 it increased *per saltum* to $12\frac{1}{4}$ millions. Each employed man who contributes pays 2*s*. 4*d*. per month of four weeks, his employer being required to pay 2*s*. 8*d*. and the taxpayer 1*s*. 3*d*., so that the workman gets an insurance worth 6*s*. 3*d*. for a payment of 2*s*. 4*d*.

Mr. Cohen had to present a thesis for his degree in Economics to Columbia University, and very wisely chose Insurance against Unemployment for his subject. He has since expanded it into this portly volume of 536 pages. Though it has special reference to the conditions of Britain and the United States, it contains full particulars of what has been done in France, Switzerland, Norway,

Holland, Denmark and Germany, with notes on Canada, Japan, Spain, and Czecho-Slovakia. He arrives at the conclusion that unemployment is a contingency against which it is both possible and advisable to insure. The larger the scale upon which insurance is undertaken, the more approximation to certainty can be expected in the calculation upon which the insurance must depend. The degree of certainty which is obtained by insurance against natural contingencies is hardly to be expected, but only such as is practically sufficient.

Mr. Cohen puts three questions: Should the State (which is a common euphemism for the taxpayer) contribute? Should the employer contribute? Should the workman contribute? and answers them all in the affirmative. To the third of these questions the answer is obvious. He who gets the benefit of an insurance should pay the premium for it. To the other two it is not so clear. With regard to the taxpayer, he is under no obligation to employ people whose services he does not want, but the consequences of unemployment are so disagreeable to him that it is worth his while to pay something towards an insurance against it. The interest of the employer also is largely sentimental. But these considerations are out of date. We have the principle of the threefold contribution established among us, and there is little prospect of its being abandoned.

Nevertheless it has proved insufficient to meet the present crisis. When the unemployed number nearly two millions, and clamour for adequate relief, such small insurance as the premiums would produce is evidently not enough. In number and necessity the unemployed go beyond it. It can only deal with normal conditions. Till these are restored, relief will have to be otherwise provided. The difficult problems that surround this state of things are outside Mr. Cohen's subject, but he devotes some consideration to them in an appendix.

He gives also some attention to the various remedies, other than insurance, that have been suggested for the evils of unemployment. He disapproves of the reduction of the hours of labour as one of these. He appreciates the work of the Employment Exchanges. He has little faith in the prospects of individual thrift.

We thank Mr. Cohen for an instructive and valuable work.

E. BRABROOK

The Human Factor in Business. By B. SEEBOHM ROWNTREE. (London: Longmans, Green & Co. Pp. ix + 176.) 1921.

THIS little book may be regarded as complementary to the author's *The Human Needs of Labour,* 1918; there he sets out the economic needs of a workman as consumer, here as producer his equally important requirements for reasonable comfort and for conditions which increase efficiency. There is also some analysis of the question whether an industry can afford to pay the wages postulated under "Human Needs"; and it is held that, in order to keep the lowest wages in a factory up to the required minimum, careful and sympathetic organisation on the part of the management must be combined with intelligent co-operation of the workman, and "that real efficiency cannot be attained until every worker is given some direct interest, not only in the performance of his individual job, but in the success of the whole undertaking, and is completely secured against any exploitation by his employer. . . . A satisfactory scheme, however, has yet to be worked out." It is to be hoped that in such a scheme the value of a man's work and his wages will increase with age; for it is commonly the case, especially in unskilled work, that the maximum wage is reached when a man is immature and also before his family responsibilities have become pressing.

On the question of hours of work the maximum is taken as that beyond which the health of workers would suffer, the minimum as that below which cost would be increased or weekly output be reduced. Since the general reduction of hours in 1918–9, there can be little doubt that in the vast majority of industrial occupations hours are not too long for health, and the problem turns on the output (or rather the net value produced) in a week of 50, 48, 44 or fewer hours. The experience of the "Cocoa Works" was that "scarcely any reduction in output" resulted from the adoption of 44 hours instead of 47; this was partly due to the better time-keeping in the shorter week. The arrangement of the 44 hours, decided by a plebiscite of the workers, was to work 10 shifts in 5 days, leaving the time from 5.0 p.m. on Friday till 7.30 a.m. on Monday free in every week; in addition to all the Saturdays in the year, a week's holiday and the 6 bank-holidays annually are taken, and wages paid as in full working weeks. If it is really the case that as much can be produced in 249 working-days per annum as in any longer period, people are in the way of obtaining as much leisure as they can use or enjoy, or indeed afford, since leisure is apt to involve expense.

We need, however, more definite statistics in which the saving of running expenses by the reduction of hours on the one hand, and the apparent waste of using expensive machinery only 2190 of the 8760 hours in the calendar year, are brought into account.

The book deals with the general questions raised, not by theoretic analysis, but by a description of the experiments made and the results achieved in one large factory. The longest chapter in the book is that entitled "Good Working Conditions," which may be commended to all those who have any part in the control of employment, though it is not of direct economic interest Chapter III, "Security of Life," is of more general importance. The risks to which every employee, or rather every employee with a family, is liable are unemployment, irregularity of employment, sickness, invalidity, old age and death. Except the last two, these risks can be greatly diminished, partly by taking thought, partly by careful expenditure, and all can be provided for by insurance. The insurance can only be met in part out of wages, at least at present; for example, provision for a widow and children in case of premature death or disablement is expensive to an individual insurer. A complete scheme, covering all these risks, has been worked out and put in force; normally it is expected to cost 5 per cent. of the total wages and salaries bill (in addition to the sums provided by the workers and by the State); but its initiation cost £166,000 in 14 years, the number of employees being apparently about 6,500, owing in great part to the expense of putting workers already in the service of the firm in as good a position as newcomers. When the nation is again at work and prosperous, an expenditure for these purposes of 1s. in the £ to the wages-bill ought to be a quite manageable proposition, whether its incidence is ultimately on wages, interest or profits. The manufacture of cocoa and kindred products may in some respects provide conditions under which broad and permanent arrangements for insurance are feasible, and risks of accident and premature superannuation are less than in general, but it does not appear to be probable that similar schemes would be much more costly except in the regions of casual and inefficient labour.

A. L. Bowley

A History of Labour. By GILBERT STONE. (London: George G. Harrap & Co., 1921. Pp. 416.)

Trade Unionism and Labor Problems. Second Series. Edited by JOHN R. COMMONS. (Boston: Ginn & Co., 1921. Pp. xiii + 838.)

MR. STONE, who was sometime Secretary to the Coal Industry Commission and Deputy Head of Production, Coal Mines Department, has set out "to depict in the broadest manner possible the history of the masses, not only in England, but in other countries also, from those days when they were slaves to these days when they are free." We cannot, therefore, look to him for original research but for the fair presentation of historical facts as discovered by other inquirers, and on the whole he has performed this task clearly and with impartiality. Beginning with the stage of unfreedom under Rome, when virtually all commerce and industry was carried on through slaves, we pass through the feudal system to the emancipation of the serf, partly through the development of the towns, partly under the influence of the Church. We next have the differentiation of the free worker into master and paid workman, and the emergence of divergent interests. Gradually the worker won his freedom from economic dependence, by securing the protection of the State for the weak, by wresting the right to combine, by obtaining education, and lastly by conquering political power. "To-day," concludes Mr. Stone, "the masses can do, if they will, what they will," and in his last chapter he considers present tendencies. He does not see much promise of efficiency in any of the forms of nationalisation that are advocated, and relies rather on the spread of education and the readiness of all to work not for themselves but for the public service. In any case he condemns revolutionary methods as a violent interference with political development. He sees "little gain in sharp upheavals," and holds that "the evolutionary forces which can be seen at work moulding the history of the masses slowly acted throughout the ages until at length the people were fitted to rule." Such a view, however, may easily lead to an apathy which would arrest the course of evolution. Not once but many times in our own history the masses were faced with starvation or slavery, and, if rebellions like Tyler's or Kett's ended in defeat, Mr. Stone should remember that "the blood of the martyrs is the seed of the Church." Slow, very, very slow—too slow—has been the course of reform in every direction, and in condemning "direct

action" to-day one need not adopt Mr. Stone's quietist attitude towards the past or the future. The vigour of reformatory belief is itself one of the evolutionary forces.

Trade Unionism and Labor Problems was first issued in 1905 and contained reprints of twenty-eight articles by various authors on different aspects of the labour problem, forming a selection of economic documents intended for use as a text-book, applying to economic teaching the "case system" so long in use in the law schools. Sixteen years later a new edition is now published with forty-five articles, none of which are reprinted from the earlier work. "Western civilisation," says Professor Commons, "is built upon security of investments, and it is the insecurity of labour that menaces it." The book, consequently, opens with six chapters on the various forms of insurance, followed by four on the labour market. "Labour management"—scientific management, piece rates, profit-sharing, etc.—occupies thirteen chapters; another thirteen discuss individual trade unions and trade-union tendencies, and the last nine chapters expound the law in relation to labour. It is unnecessary to commend this work; it will prove as useful as its predecessor as a text-book and as a work of reference.

HENRY W. MACROSTY

The Rise of Cotton Mills in the South (*Johns Hopkins University Studies*). By BROADUS MITCHELL, Ph.D. (Baltimore. 1921. Pp. viii + 281.)

The Cotton Industry in France. By R. B. FORRESTER. (Manchester University Press. 1921. Pp. xvi + 142. Price 10*s*. 6*d*.)

The Cotton Control Board. By HUBERT D. HENDERSON, its Secretary. (Oxford: Clarendon Press. Carnegie Endowment War Series. 1922. Pp. xiv + 76. Price 5*s*.)

MR. MITCHELL's book aims at explaining why the South was so predominantly agrarian before the Civil War and how it started on the industrial phase: his "purpose has been to describe the birth of the industry in the South rather than its development" (p. viii). His argument is that in the eighteenth century the South "was well started towards a balanced economic development, with manufactures as well as agriculture" (p. 11)—domestic manufactures, of course, in the first instance: that the growing influence of slavery, together with Whitney's cotton gin, easily

worked by slave labour, threw all the weight into the raw material production scale from 1810 to 1860: that slavery meanwhile deterred white immigrants: that from 1865 to 1870 the development of industry began to be urged as a "reconstruction duty"; but that "there is every reason for selecting the year 1880 as the beginning of manufacturing development" (p. 59). He contends, and goes far towards proving, that the movement was a deliberate act of will, of will stimulated by the Press—from which he quotes almost overmuch, but from which, in the circumstances, he was bound to quote extensively. Municipal patriotism helped regional patriotism. "If Belton got a mill, Williamston would want one. The townspeople would go to their leading citizen. It made no difference what a man was, so long as he was the leading citizen he had to become a mill president," said one of the innumerable business men whom Mr. Mitchell has interviewed (p. 157). "Even machinery was wrapped with idealism and devotion," and "the erection of plants was the object of close concern on the part of a whole community" (p. 160).

Labour came from the "poor whites," who, however, as Mr. Mitchell is careful to point out, were of one stock with the less poor. No one was very rich just after the Civil War. Child and woman labour was not a curse but a boon to a desperately poor population among whom "every bull yearling was under chattel mortgage" (p. 174). Negro labour was exceptional and not usually successful. Capital came in driblets from the whole community, though at times merchants of some substance supplied the main stream. There was little financial mechanism. "People just put in their money and made it go as far as it would without thought of preferred stock and bonds" (p. 259). This applies to the early days, 1875 to 1890.

The book is just a little diffuse and gives some glimpses into the obvious. "It is scarcely necessary to say that expectation of profits stimulated the erection of mills" (p. 197). "Entertaining a synthetic rather than analytic view-point, it has been sometimes said, with empirical reasoning, that industry in the South grew out of a natural recovery following the War. While not accounting very well for a change of mind that was certainly present, this argument has point" (p. 98).

Mr. Forrester's sketch of the contemporary French cotton industry is clear, businesslike, and, as Professor Macgregor says in an Introduction, "packed with information obtained at first-hand." There is so little information in English on the organisation of any French industry that this exact and well-informed

account is particularly welcome. Contrast with Lancashire is almost uninterrupted—an industry grown and modelled under protection, and unable to do without it; scattered over four main and some subsidiary districts; much affected in its location by the circumstances of war and frontier changes; unable to compete effectively in international markets, and finding its only important outlets overseas in colonial dependencies kept for it by a mercantilist policy; buying most of its machinery from abroad—that is, from England; still employing some hand-loom weavers; very poor in joint-stock companies and rich in almost patriarchal family businesses; until very recently weak in "combines" and joint action among employers; on the side of labour, lacking the uniform piece rates of Lancashire; working without the Saturday half-holiday ("la semaine anglaise") down to 1919; in three of its four main areas devoid of any effective Trade Unionism; given to rather paternal "welfare" schemes, which are only beginning to be replaced by national welfare policies; now faced with the reabsorption of Alsace, once its most important district, but cut off by tariff barriers for forty-seven years; and throughout notable for its specialities rather than for its efficient and mechanical mass production. Only one should not make the mistake of considering it a typical French industry as cotton is typically English; for, as Mr. Forrester notes, it never has been even the leading French textile industry. Silk and wool were always well able to compete in open international markets.

Mr. Henderson's seventy pages on the Cotton Control Board are precisely what an economic study of a war-time mechanism ought to be—so good and so concise that summarising is all but impossible. Lancashire industrial psychology, it would appear, came as a revelation to the Secretary of the Cotton Control Board. (He took up the work, one seems to remember, at rather short notice.) A man from inside the trade could hardly have sketched it with such delicate accuracy—as of a sympathetic artist in a strange land, his eyebrows always raised a little in kindly surprise, his powers of observation never asleep. Particularly well observed and well drawn are the personality and influence of Sir Herbert Dixon, the chairman. It is so easy and so deplorably common to describe social mechanism—of peace or war—as if it worked itself. How the Board limited the running of American spindles and paid for resultant unemployment both in spinning and weaving by "levies" on the Egyptian; how it failed in handling the relations of spinning and manufacturing; how wages

were kept disproportionately low for a long time; what the rota was and what the psychological effect of "playing off"—these are all written in the book.

The crisis came in the spring of 1918. Tonnage for American cotton was stopped for a time. The reviewer recalls how, at a certain meeting, he uplifted his voice as advocate of the Control Board, and how a fighting statesman hit the table and said, "Did I hear someone mention cotton? Why should we waste tonnage which we haven't got in bringing over both their food and their cotton? Feed 'em gratis if necessary. It would be more economical." Stoppage of cotton led to the abolition of the rota and "playing off," and that to an ugly wage crisis in July—though, as Mr. Henderson shows, it was less ugly to good Lancashire psychologists than to the outside world. The turn of the war tide that month, and the importunity of the then President of the Board of Trade before the War Cabinet, brought in more cotton during August, but failed to avert the spinners' strike of September. When the spinners had got themselves into an impossible position "it was plain that almost any device would serve to secure a return to work." The device was the appearance of the Prime Minister's letter from a sick bed in Manchester Town Hall—dramatic, appealing, instantly successful and productive of a Cotton Inquiry Tribunal. "It must not be supposed from the conflict of the Control Board and the operatives that the Board ever became unpopular. An effort of imagination must here be made to appreciate the peculiar psychology of Lancashire. The quarrels . . . stubbornly contested though they were, bore the character of family quarrels; and even at their height the Board never lost its hold upon something more cordial than the approval of the operatives, upon what I can again only call their pride." A well-selected Secretary this of the Control Board. He gets at the very pulse of the machine.

The Board ended its days, "an early and not unwilling victim," in February 1919.

J. H. CLAPHAM

The Land and its Problems. By CHRISTOPHER TURNOR. (Methuen, 1921. Pp. 254. Price 7*s*. 6*d*. net.)

THIS is an extremely well-meaning, but very uneven and in some respects quite inadequate book. The spirit Mr. Turnor shows is so admirable, and many of the things he says are so

sensible and helpful, that one regrets being unable to give a favourable verdict upon it as a whole. It is in the regions of economic theory and history that the faults are most apparent. The historical introduction, though not without points of interest, is an ill-assorted and ill-arranged hotch-potch which had better have been omitted. It contains such extraordinary statements as that "when the Roman occupation of England ended, all attempt at agriculture ceased" (p. 12), that "up to nearly the end of the sixteenth century it may be said that cattle- and sheep-grazing were the mainstay of the landowner and farmer" (p. 13), and that "before 1400 the farmer did not pay rental (as we understand the term) to the landowner; he gave the latter one-half of the annual produce from his farm" (p. 26). On the theoretical side, Mr. Turnor is too much inclined to regard gross production per acre as the great test of agricultural efficiency. The absurdity to which this may lead has been clearly set forth by Mr. Arthur Ashby in an important article on "Standards of Production in Agriculture," published in the *Edinburgh Review* for January 1922. This article, of course, appeared after Mr. Turnor's book; but he might have been saved from some fallacious assumptions if he had studied the criticism of Sir Thomas Middleton's pamphlet on German Agriculture which was contributed by Mr. R. G. Hawtrey to the ECONOMIC JOURNAL in March 1917. Again, few economists will agree with Mr. Turnor's contention, that "the inherent or prairie value of the land is non-existent." Apparently his idea is that, if the rent paid by farmers does not exceed the current rate of interest on the capital invested in improvements in the past, the land cannot be, in the Ricardian sense, rent-paying land at all. But he states himself, quite rightly, that English agricultural land has for long been under-rented (which, in theoretical language, means that part of the Ricardian rent has been pocketed by the tenants), and, apart from this, it is surely not the *cost* of improvements in the past but their present market value which must be taken as the measure of how much of what the tenant pays is really interest on capital and not rent. Objection may also be taken to the assumption that the purchase of large quantities of foreign foodstuffs is disastrous "in our present financial crisis," for it is not merely a question of whether "we can produce as cheaply within the Empire as in any other part of the globe." Obviously if a given unit of productive resources will enable us to obtain more food when it is devoted to the manufacture of goods for export than when it is applied to the development of home agriculture, the latter use of it must

be uneconomic. Further, that the policy of the plough is necessary in the interests of national defence is, as usual, assumed without argument. Has any authoritative body of expert naval, military or air-force opinion ever unequivocally championed this view? On the face of things, the idea depends on a confident prophecy that it will continue to be easier to sink ships at sea than to destroy standing crops by aerial attack; and though a layman must hesitate to express an opinion on a matter so highly technical, it is surely not impertinent to notice (i) that a cornfield is a stationary target, (ii) that it is most vulnerable at the season of the year when the weather is usually most favourable to flying, and (iii) that the counties best suited to corn-growing are those nearest to the Continent. There is yet another point against which protest must be made. We are told that "by insuring the farmer against loss the Government gains a right to see that the farmer pays his labourer an adequate wage" (p. 61). This may be a matter of opinion; but the principle that the State may only enforce good conditions of employment if it safeguards the employer against resultant loss would clearly destroy nearly all the industrial legislation of the past hundred years.

It is refreshing to turn from Mr. Turnor's theoretical assumptions to his remarks about the rural community and the concrete realities of farming. What he says about the position of the landlords, and about their virtues and failings, is eminently wise, just and discriminating. Of the farmers and labourers too he writes with sympathy and understanding, and for both classes he has some words of just and kindly reproof. In these days when wage-rates (in relation to the cost of living or the selling prices of agricultural products) are commonly compared with the rates actually prevailing before the War, it is good to be reminded that in those days "there was a general consensus of opinion that 20*s*. a week in cash should be the minimum wage" (p. 24). In regard to small holdings, Mr. Turnor urges that the motto should have been "make good before you extend" (p. 114), and urges very truly that it would have been a good thing if the Government had "set out in the first place to organise the existing smallholders and to create for them conditions as good as exist in other countries." The criticism of traditional methods of cropping in Chapter V, though no doubt some experts would doubt the conclusions to which it points, is clear and stimulating. It is supplemented by an interesting essay on the Harper-Adams experiments in *Arable Dairy Farming* written by Mr. James C.

Brown and printed in Appendix III. The fact that farmers are commonly very ignorant about the comparative profitableness of different branches of farming is emphasised. In this connection the following passage is significant:—

"It should be noted that, during the period when Mr. Strutt's figures show that wheat was the most profitable crop, the practically universal opinion amongst farmers was that wheat-growing did not pay, but that raising live stock did. Personally, I began my farming operations on a large scale in 1903, when I had to take over 4000 acres of 'mixed farm' land as they stood; and one very soon realised from the account books that the live stock department was showing a loss, while there was a good profit from cereals. In general terms, the book-keeping on farms is not accurate enough to show which department is making a profit, and guesses on such a subject are of no value" (p. 108).

On the need for education much is said. Mr. Turnor has very enlightened views on the subject, and, though he is perhaps inclined to give too much prominence to manual training, is fully alive to the importance of a general and literary education. Speaking of continuation schools, he says, "It is essential to instil a real love of books, for nothing would add a greater interest to the lives of those living in country districts than a keen and intelligent interest in books" (p. 209). In relation to the "economies" which threaten the future of English education at the present time, it is comforting to find a practical agriculturist of Mr. Turnor's eminence saying that "from the national point of view nothing will be more disastrous than to adopt a policy of false economy in regard to education" (pp. 194–195). He quotes the opinion of Professor von Rumken upon the effect of education upon German agriculture: "The great progress that agriculture has achieved in Germany during the last quarter of a century is the result of the union of practice with science, and proves that money spent on research and on education brings in a high rate of interest, and is compensated for by increase in land taxes and of revenue from the State railways" (p. 79).

It remains to note that Mr. Turnor's book was written before the repeal of Part I of the Agriculture Act, though that repeal is mentioned in the Preface. It seems odd now to find in Chapter III the statement: "I do not believe that public opinion would consent to the abolition of Wage Boards" (p. 68).

REGINALD LENNARD

The Enclosure and Redistribution of our Land. By W. H. R. CURTLER. (Oxford: Clarendon Press, 1920. Pp. 339.)

THE natural expectation which readers of Mr. Curtler's earlier volume will feel when they turn to the present book will not be disappointed. Somewhat unfortunately for historical investigation, the subject of enclosure and its effects has been brought within the perturbed and perturbing area of political controversy, with the result that the dispassionate writer is apt to find himself claimed as a partisan or repudiated as an opponent. Atmospheric pressure of this kind is disturbing to the peaceful student. It is the more pleasing, therefore, to welcome Mr. Curtler's treatment of this subject and to recognise the cool impartiality which he displays.

As he himself suggests in his Preface, the book may be divided into two parts—the earlier chapters, where he largely confines himself to summarising, though not without apt and intelligent criticism, the conclusions and results of the work of other writers, and the later chapters, in which he attempts a new and thorough investigation of the nature and effects of the enclosures in the eighteenth and nineteenth centuries. It would be unjust, however, to accept Mr. Curtler's modest disclaimer of originality in respect of the former position: While he has not, it is true, gone through the material in the way that earlier writers have, he none the less shows considerable acquaintance with some of it, and his familiarity with the general agricultural development as a whole gives him a distinct advantage in interpreting the bearing of the former or changes in the open-field system. The reader who wants to trace the general movement from the open field to enclosed farming through history is indebted to him in many ways. Three may be singled out for mention. In the first place he gives a very fair and readable account of the open-field system and the holding of land in former times, without too much technical detail, and though, no doubt, certain matters still requiring investigation are somewhat summarily disposed of, his general fairness is beyond question. Estimates such as that of Davenant on page 129, for instance, have never been properly examined. Again, statements of the policy of the Government are perhaps too definitely expressed. But these matters do not detract seriously from the value of the book to the general reader, while the serious historical student will derive great benefit from the persual of an account of an agricultural development covering several centuries, some part of which he may desire to study in

detail and with reference to original authorities. In the second place, where he comes nearer modern times, he has done the student a real service in bringing together and contrasting or comparing the estimates and statements of different writers, thus enabling the reader to see the nature of the matter in dispute, or, as that is perhaps too strong an expression, the extent of their difference. In Chapter XVI he sets out side by side the estimates of the extent of enclosure arrived at by earlier writers. In this instance, indeed, the substantial agreement is far more noteworthy than any difference. In the same chapter, too, he gives a summary of the County Reports prepared for the brief-lived Board of Agriculture. The exact value of these Reports is somewhat difficult to estimate; as is inevitable in a compilation of this character, some of the writers were much better than others, and it is to be hoped that some time a scholar of Mr. Curtler's competence will go through these Reports and compare their general conclusions with other data. In the third place, Mr. Curtler throughout bears in mind the connection which exists between a system of cultivation and the needs of the community as a whole. In some books the influence of agricultural writers in promoting enclosure has been emphasised in such a way as to suggest, no doubt unconsciously, that it was the influence of the writers rather than the accuracy of their observations and judgment which gave strength to the movement. Here Mr. Curtler makes no mistake. The largest factor in the eighteenth and early nineteenth century was the need of the country for more produce. In the later chapters the author turns to the consideration of the effect of enclosure both direct and indirect, and here he has worked mainly on original material and his conclusions deserve most careful attention. He has done well to follow the development of the new agricultural system through the nineteenth century, as by that means he is able to emphasise not only the character but the magnitude of the change. The alteration which accompanied and followed on enclosure is to be judged from two points of view, as to, that is, its effect on the supplies of the nation and on the classes engaged in cultivation. On both these matters Mr. Curtler writes with great judgment and knowledge, and here again his general acquaintance with agricultural method as well as with agricultural literature is of great assistance. He knows what he is writing about and he writes with decision and care.

The book as a whole is admirable and impartial, and should be read both by historical students and those interested in the agricultural developments of the last two centuries. Of course

it is not, and does not profess to be, a final treatment of the subject, but it serves a most useful purpose as a clear general narrative, while, in the later chapters in particular, a real addition is made to existing knowledge.

E. C. K. GONNER

The King's Council of the North. By R. R. REID, D.Litt. With coloured map. (London: Longmans, Green & Co. 1921. Pp. x + 532. Price 28*s*. net.)

IF English history ever comes to be written in a reasonably impartial spirit, it will be owing to the new emphasis on its economic aspects. This is particularly likely for the Tudor and early Stuart periods. It is true that Gardiner, while mainly interested in "political" issues, came to realise that something like a reasonable case could be made out even for the theory of government of James I and Charles I. But we should hardly have got beyond a more or less sentimental concession to an impulse of fairness, if we had not attained some more definite conception of the life of the common people which lay at the back of all the pamphleteering and speechmaking. Miss Leonard began to help us to this by her book on the poor law (1900): and Mr. Tawney carried us further by his agrarian researches (1912). And now Miss Reid comes with an elaborate study of the Council of the North which fell with the Star Chamber in 1641, and which has only escaped from the odium cast on that institution because it is too nearly forgotten even to be a historical bogey.

To Hallam in 1827 the Council of the North was "the arbitrary jurisdiction" of an "irregular tribunal, grown out of the despotic temper of the Tudor dynasty." He added that it was "a court long obnoxious to the common lawyers," as if that sufficiently disposed of it for all right-thinking citizens; and wound up by telling us that it was "lately the sphere of Strafford's tyrannical arrogance." To Miss Reid, after a further century of parliamentary government, it is an important administrative and judicial organisation, built up by Henry VIII on the basis of earlier institutions, with quite a reasonable degree of political wisdom, to cope with the peculiar difficulties in the way of the maintenance of order in the turbulent and faction-ridden North, and with the particular *object* of protecting the body of the people from the injustice and rapacity of the powerful. Reaction from Whig historiography does not lead her to idealise its actual performances; and her eyes are very open to its defects at the

time when Wentworth, unfortunately for himself, tried his hand at reforming and strengthening it. Neither of the first two Stuarts was a good man of business or competent to keep a firm control over the personnel of the public service: quite unworthy persons obtained offices and privileges by Court favouritism and wire-pulling, and cared but little how greatly they discredited the royal government. All the intrigues by which base men helped to spoil a good cause Miss Reid seeks to unravel, without partiality, as far as I can see, in any direction. But she leaves us in no doubt with whom our sympathies should be in the petty antagonisms which hampered Strafford as President of the Council, nor as to the true nature of some of the forces which combined to bring about the fall of the whole Tudor-Stuart machine of government.

To the present reviewer the most instructive part of Miss Reid's book is the additional light she casts on the agrarian changes of the sixteenth century. The development of the land system from the twelfth to the middle of the fifteenth century has, by this time, been pretty thoroughly explored. It is the two centuries which lie approximately between A.D. 1450 and A.D. 1650 which still remain somewhat obscure. There is still a good deal to learn as to the stages by which our present system of complete ownership on the one side and tenancy at will on the other emerged from the feudal complex of obligations and usages. We have got to know of late something of the way, the belated way apparently, in which the royal courts threw their protection over those customary tenants who could prove their claim to enjoy copyholds of inheritance. But there are other important elements in the problem. I ventured, many years ago, to point out that the lord's right to demand a fine of undetermined amount upon the admission of the heir of a copyholder put a dangerous power into the hands of unscrupulous lords. The vital character of this consideration in the North, Miss Reid now brings out very clearly. In the North Parts the fine upon entry was known as a *gressom* (= *ingressum*). According to Miss Reid (p. 100 n.) custom "even before the end of the thirteenth century" had fixed the *gressom* at double the white rent." This statement wants some further explication; for money rents for customary holdings were hardly common at that date. But if fixed by custom, in law the amount was still at the will of the lord; and of the opportunities this gave to the grantees of monastery lands after the Dissolution some of them were not slow to avail themselves. Among the Articles of the Pilgrimage

of Grace was one demanding that in future the lords of abbey lands should have at every change "two years' rent for gressom and no more" (p. 124). To redress the grievances of tenants was, accordingly, one of the main purposes for the more definite establishment of the Council of the North in 1537. The Instructions given to it in 1538 (p. 465) contain a paragraph which is a capital and quite typical expression of Tudor state policy, alike in principle and in application. The Council was directed

"from time to time to make diligent inquisition who hath taken in and enclosed any commons, called intakes, who be extreme in taking gressoms and overing of rents, and to call the parties that have so used themselves evil therein before them; and, leaving all respects and affections apart, they shall take such order for the redress of the enormities used in the same, as that the poor people be not oppressed, but *that they may live after their sorts and qualities*."

The fundamental principle behind the Tudor policy—it has often been pointed out—was the conception of the common weal as made up of classes or, as they are called here, "qualities," each with its own duties and rights. It would be interesting to know when, in the speech of the people, gentlefolks acquired the peculiar designation of "*the* quality."

Another suggestion made many years ago by the present reviewer was that the transition from mediæval to modern doctrines of landlordship was facilitated by pressure upon customary tenants to accept leases in exchange for their copies. This is also confirmed by Miss Reid's inquiries. In this matter the Council of the North helped on the transition by deciding as early as 1576, in the case of the tenants of the Dean and Chapter of Durham referred to it by the Privy Council, that the acceptance of a lease quite destroyed any previous tenant-right (p. 300).

The peculiar feature of the development in the North, according to Miss Reid, was that customary tenure was there so closely associated with military service that, when the need for that service passed away with the pacification of the Border, it tended to take the customary tenure along with it.

"Throughout the north," she tells us, "the customary tenants, besides paying fines on death or alienation, and doing suit at the lord's court, were bound to ride to the Border at the lord's bidding; but during the long peace after 1560 this service fell into desuetude, and many landlords began to claim that these tenants held at will. The result was that of the thousand cases yearly determined by the President and Council at the close of the reign, the greater number were tenant-right cases."

I do not know whether Miss Reid quite realises the very considerable significance of such propositions. In footnotes she gives references to two MS. authorities in the Record Office. I hope she will not think it shows distrust if I say that all those who are interested in economic history would have been immensely grateful for a few pages of documentary evidence. We could well have spared many pages of ingenious disentanglement of Court intrigues and local jealousies—disentanglement which is not always quite convincing—if their place had been taken by a rather more thorough and a much better documented treatment of the economic problems she touches upon, with—may I say it?—rather too light a touch. The Registers of the Council have apparently been lost. Less likely things have turned up. But the chance is small. Meanwhile, as Miss Reid must have piles of transcripts from the masses of material she has evidently worked through, could she not print a judicious selection of excerpts of economic importance? There are Journals and learned Societies' publications which could readily find room for documents of real significance.

William Ashley

The Economic History of Ireland from the Union to the Famine. By George O'Brien, Litt.D. (London: Longmans, 1921. Pp. xii-624. 21*s*. net.)

In this book Dr. O'Brien, whose industry is unwearied, has supplied a continuation or sequel to his study of eighteenth-century Ireland. Like a great many sequels it falls somewhat short of the high level of the earlier part. It is hard to escape feeling that the author in approaching modern times has been affected by the sentiment which was engendered by the grievances of his country.

The keynote is given in his quotation of Grattan's phrase, that the Union was the marriage of Ireland, which he follows up by the query, "Why did the bride seek a divorce, or at least a separation?" and in examining this question Dr. O'Brien seems to appear as counsel for the lady and succeeds in presenting a well-weighted plea in support of her demand. Or, to change the illustration, we get a powerful indictment by a competent prosecutor of British administration in Ireland during the first half of the last century. The evidence is abundant, and judgment in the case has, it may be said, been already pronounced in the field of practical politics. But on this very ground the

student of economic history might be expected to take a more judicial attitude. His function is clearly to expound the facts in their due setting and relation with the use of the methods of modern inquiry, and to frame his pronouncements with full view of the qualifying circumstances and the influence of general tendencies in affecting the course of events.

Probably as a result of the general attitude just indicated, there is a decided overloading of the text with quotations. Lord Morley once complained of the "steady-handed profusion" with which Taine poured his note-books into the text of his *Ancien Régime*, and Dr. O'Brien is quite as bad an offender in this respect. Thus, in dealing with the famines before 1845 we get an extract from the Census Report of 1851, covering seven pages (pp. 224–231), which is better fitted for a collection of economic documents than for a regular history. We feel (again to follow Lord Morley) that the result is "far less effective than it would have been if all this industrious reading had been thoroughly fused and recast into a homogeneous whole." We should much prefer two pages from Dr. O'Brien himself, dealing with the earlier famines, supported by the due references.

It would be almost an impertinence to praise Dr. O'Brien's industry in collecting material, and it is plainly a duty to thank him for the service that he has rendered to those who are interested in his subject. We would, however, have liked some criticism and appraisement of the value of the varied mass of material that he has handled. There is obviously a wide gap between John McGuire's *Plan of General and Perpetual Employment*, which is the authority for the startling statement that in 1817 "74,000 operatives were out of employment in Dublin alone" (p. 421), and the evidence presented in the works of Newenham, Wakefield and Kane. One of the essential needs of economic history is the thorough sifting and weighing of sources with special attention to the tendencies to error that affect all polemical writing. A more instructive example is afforded by Dr. O'Brien's treatment of the discussion on the repeal of the "Union Duties." He gives in some detail the pleas of the Irish manufacturers for the retention of these taxes, and seems to accept them off-hand at their face values. He takes no note of the fact that this has been the position of almost all protected producers. Congressional tariff hearings are overburdened by such demands, varied only in the degree of protection claimed. A reference to the proceedings now going on before the committees under the Safeguarding of Industries Act will show how

deep-rooted this desire is and how critically it should be treated. In naming Ensor as the only Irish writer of importance who favoured the repeal of the duties (p. 427 *n*.), Dr. O'Brien excludes Sir H. Parnell from this class. In a case of this kind a full review of the evidence and arguments on both sides is expected from the historian. Even the advocate of a good case gains by his liberal treatment of the opponent.

Apart from the question of the critical treatment of evidence, we recognise that the author has given a valuable exposition of many of the faults of the system of administration under which Ireland was placed in the earlier nineteenth century. In particular he exposes the evil effects of the Land Laws in their operation on both production and distribution. We believe that this was the chief cause of the unhappy position of Irish agriculture and of the retarded economic development of the country. Insecurity of tenure, uneconomic distribution of land and inefficient production were the outstanding marks of the situation. The growth of capital was made almost impossible unless in those cases in which modifying conditions (like those of the Ulster tenant right customs) came into play. The reaction of the land system on manufactures and commerce can be traced all through the period. For both industry and trade suffered from the lack of the home market that a prosperous agriculture would have put at their disposal. All the efforts to stimulate particular branches of manufacture are feeble as compared with the normal healthy action of the demand of a prosperous farming class. To this chief cause of evil we may add the inheritance of political conditions which depressed the largest part of the Irish population. Had a reform of the land laws, a settlement of the tithes and Catholic emancipation, honestly carried out, accompanied the Act of Union the economic condition of Ireland would have been very different from that which Dr. O'Brien depicts. The non-enactment of the Corn Law of 1815 would have been a further gain to Ireland. At this point we regret to part company with our author's line of argument. For him "the doctrine of *laissez faire* which reigned predominant in the early part of the nineteenth century" (pp. 130–1) appears as the cause of the unjust distribution of land. On the contrary, we are inclined to hold that the sufferings of Ireland were largely due to parental (which includes step-motherly) government. Irish legislation was in the main in the hands of the landlord class, which certainly had not the slightest sympathy with any doctrines or dogmas of political economy. Class legislation

is not *laissez faire*, though it may resist interference with its supposed interests. It may even, we think, be maintained that a wise *laissez faire* policy—the *laissez faire* of Turgot, not the policy of neglect which some people identify with it—would have been of great benefit to Ireland as it emerged from the eighteenth century. We cannot accept Dr. O'Brien's rendering of the maxim, viz. "*having put a country into a most unsatisfactory condition, leave it there*"; we would rather say that it means for a country in economic fetters, "loose her and let her go." However this may be, it is plain that neither the *laissez faire* of the French economists nor the "natural liberty" of Adam Smith gives the slightest countenance to the larger part of the economic legislation applied to in the earlier nineteenth century. We therefore are constrained to dispute the statement that "the destiny of Ireland in the early nineteenth century was very largely moulded by the ideas of two great economists, Adam Smith and Malthus" (p. 71). The land laws and the situation as to population in 1845 may be specified in support of our view.

An interesting section of the History is devoted to the question of "absenteeism" (pp. 513–525), placed with an apologetic explanation under the head of "Public Finance." Dr. O'Brien, as might be expected, criticises at length the argument of McCulloch, but altogether omits to consider the views of Senior and Longfield, which are hardly to be neglected. His own conclusion, that "The real evil of absenteeism was not local but national" (p. 524), stands in direct opposition to that of J. S. Mill, "Absenteeism is a local, not a national evil" (*Early Essays*, p. 66), a proposition based on a careful and elaborate train of reasoning, which is also ignored by Dr. O'Brien, who may plead that he is not specially concerned with economic theory.

On another important question—the repeal of the Corn Law, which in fact lies outside the well-marked period of Dr. O'Brien's book—he takes the extreme view that Peel's government was guilty of something approaching a breach of faith to Ireland. "Nothing was more clearly grasped in the early nineteenth century than the proposition that Ireland was England's granary—in other words, that England was to provide a preferential market for Irish corn in return for the abandonment on Ireland's part of all pretence to become an industrial country" (p. 196). We do not think that there is any real evidence in support of this conception. There were no contracting parties to this disreputable bargain, for such it would have been. Certainly there was

nobody authorised to bind the English working population, which had always protested against the restriction on the import of corn, to sacrifice themselves in the supposed interest of that section of the Irish people—the landlords—that had always been hostile to the popular cause. We feel that O'Connell had a truer sense of the situation than that presented by Dr. O'Brien.

Space prevents examination of many topics that arise from the narrative of the economic movement in Ireland after the Union, but we can heartily recommend this History to the serious student if he is prepared not "to believe and take for granted . . . but to weigh and consider." He will realise the complication of the issues of Irish history.

Finally, we would beg of Dr. O'Brien to reconsider the following statement: "One of the first acts of the newly-founded Manchester Chamber of Commerce was to protest against what it considered the backward step of the legislature [in retaining the Union duties]. *It was the resolution passed on this occasion that gave the Manchester School its name.*" (The italics are ours.)

C. F. BASTABLE

A History of the Peace Conference of Paris, Vols. IV and V. Ed. by H. W. V. TEMPERLEY. (Henry Frowde and Hodder & Stoughton. Pp. xxiv + 528; xv + 483.)

THE Institute of International Affairs and its editor are alike to be congratulated upon the progress of their *magnum opus*. It is conceived on a grandiose scale, and, thus far, justifies the adjective: and even if it shows in places marked signs of something almost approaching extemporisation, this should be ascribed primarily to the immensity of the subject and the frailty of human nature, even in the supreme manifestation of academic objectivity.

To assist the principal actors in the tragi-comedy of Versailles a body of experts was hastily improvised. That the prompters themselves did not always know the play need not surprise us. That the actors seldom heeded their promptings may yet prove to be one of the greatest tragedies of history.

In these volumes some of the experts have endeavoured to describe the *mise en scène* of 1918–19 for the benefit of their own time, and of generations yet unborn. They admit that it would be premature to write of the practical working of the clauses of the various Treaties in this year of grace 1921, and therefore concentrate primarily upon the actual meaning of the Clauses and of "the ideas inspiring those who drew them up." The

magnitude of the task becomes at once apparent, and much must be excused to those that loved much.

Volumes IV and V, with which we are here concerned, deal with the Peace Settlement in Central Europe. The former proves beyond all manner of doubt that the Dual Monarchy had already ceased to exist by November 1918, a fact too often neglected by critics of the Treaties. Nationality may be a disturbing factor in economic theory as in economic practice, but it must not, on that account, be neglected. And more important still, it was no new-fangled device of Allied statesmen for winning the war: its origins in Central Europe must be looked for, not in the speeches of President Wilson, but rather in the character of Habsburg rule from the days of Mohacs and the White Mountain down to the infamous Ausgleich of 1867, and that yet more infamous chapter that ended in the notorious Friedjung trials. One may well doubt whether any more comprehensive account of the Habsburg *Götterdämmerung* has yet been given, in so limited a compass, as may be found in Mr. Namier's chapter in Vol. IV of this History. In the chapters on the so-called "New Nationalities," also, the reader will find a clear and almost excessively succinct account, for which he would previously have been obliged to search many books in three or four languages, without always being certain of success in the end.

The necessity for a new political organisation in Central Europe on the basis of nationality having been dealt with, attention is paid in Vol. V to the economic and legal interpretation of this guiding principle. On no conceivable method of delimitation could frontier lines be drawn to correspond even moderately accurately with racial boundaries. Yet the quintessence of Wilsonism was that State and Nation must coincide. An attempt was therefore made to approximate as nearly to the ideal as was possible—giving the benefit of any doubt that might arise to the victors—and to satisfy the dictates of conscience by devising a scheme for the protection of the inevitable minorities. The genesis and scope of the Minority Treaties are carefully analysed in chap. ii; but the much more important question of their actual working is illustrated solely by the Czechoslovak Language Law of February 1920, which is included among the documents at the end of the volume. And here let it be added that these volumes contain a most useful collection of Treaties and other documents.

A second, and, for our time at any rate, an even more important difficulty in the application of this principle of nationality lay in the economic situation of the Danube lands. For while it

would be hard indeed to regard the former Dual Monarchy as an ideal economic unit, a common political organisation had nevertheless done much to determine the economic orientation of all the Habsburg lands. The economic readjustments rendered inevitable by changed political conditions therefore called for the greatest wisdom and foresight on the part of the Allied statesmen.

The chapter on Economic Reconstruction in the Treaties (Vol. V) deals with this aspect of the question. Lieut.-Col. Peel's contribution reads very largely like an *ex parte* statement. But his *apologia* is at times decidedly half-hearted and not always convincing. The Austrian Reparation chapter is defended on the ground that it does not really mean anything. No lump sum was fixed, not because the advisability of the course was not "as clear to the Conference as to any of its critics," but because "it was not possible to do it within any reasonable time." At the same time we are told that everybody knew that Austria could not pay any indemnity at all. The simple-minded critic, uninitiated in the mysteries of *la haute politique*, must even then have asked why the Reparation chapter should be included in the Austrian Treaty in any shape or form; and the history of the last two years has certainly not diminished the force of this criticism.

The difficult question of the allocation of Austro-Hungarian liabilities among the successor States is justly described as a delicate one. But the assertion that "by all the rules of international law, broadly speaking, a successor State is liable for the debts contracted by its predecessor" seems rather an overstatement from the pen of a British writer, in the light of Lord Alverstone's judgment in West Rand Gold Mining Co. *v.* R. Be this as it may, some people will find it hard to view with equanimity a treaty, however just, the probable effect of which would be to drive Austria into bankruptcy. The addition that "the bankruptcy that followed would not be caused by the financial clauses, but by Austria's past history," may possibly be true, but is surely hardly a sufficient justification for the policy itself.

Lieut.-Col. Peel, in defending the financial clauses of the Treaty against the critics, points out very clearly the difficulties in the way of creating a uniform International Currency for the Succession States, and rightly shows that the question was greatly complicated by the use of the printing press in Austria and Hungary in the early months of 1919. But this surely does not exonerate the authors of the Treaty from blame, for if the protection of minorities within the Succession States is not regarded

as incompatible with their sovereignty, surely some measure of control over the issue of paper-money would also have been permissible? And the case is greatly strengthened when we remember that all these States have had financial assistance in some shape or form from one or other of the Allies. Dr. Rašin, the first Czechoslovak Minister of Finance, was advocating some measure of Allied control over the German Imperial Bank and the Austro-Hungarian Bank to prevent the issue of uncovered paper as early as November 1918, and if this policy had been adopted, the present position of the unfortunate Danubian States would certainly have been much more satisfactory than it is.

Prof. Young, in chap. i, Part IV, gives us a useful summary of the commercial policy adopted in the German as well as in the Austrian, Hungarian and Bulgarian Treaties. The third of President Wilson's famous Fourteen Points, advocating "the removal of all economic barriers and the establishment of an equality of trade conditions" was interpreted out of existence. When we bear in mind the extreme temptation for weak and not yet well-established States to resort to the Customs as the easiest means of solving their immediate financial difficulties, which the crushing burdens of armaments rendered doubly urgent, we cannot but be amazed at a policy which, instead of encouraging Free Trade in the former Habsburg lands, actually limited the treaty-making rights of certain of the new States in this respect.

Prof. Young is certainly right in stressing the baneful effects of "purely political considerations"; though, in the light of more recent developments, one cannot but wonder whether he is equally right in saying, of these particular clauses, that "probably they go as far towards a solution of the problem as was humanly possible under all the conditions that existed at Paris." Would it not have been possible, for instance, to have given more definite encouragement to the policy which eventually led to the Conference of Porto Rose?

This History of the Peace Conference must be consulted by all who wish to understand the multifarious problems that came up for solution at Versailles; and while the economic chapters make sad reading, we can only hope that the policy of self-help recently initiated with considerable success by Dr. Beneš will lead to a return of sanity while there is yet time.

I. L. EVANS

NOTES AND MEMORANDA

THE GEDDES REPORTS AND THE BUDGET

First Interim Report of Committee on National Expenditure. Cmd. 1581. Pp. 172. Price 4*s*. net.

Second ditto. Cmd. 1582. Pp. 113. Price 3*s*. net.

Third ditto. Cmd. 1589. Pp. 170. Price 4*s*. net.

Parliamentary Debates: House of Commons. May 1, 1922. Price 1*s*. net.

Estimates for Civil Services for the year ending March 31, 1923. Memorandum by the Financial Secretary to the Treasury, and Tables. H. of C. paper 32. 1922. Price 1*s*. net.

Financial Statement (1922–23). H. of C. paper 77 of 1922. Price 3*d*. net.

THE tendency to waste must be reckoned as an element of original sin. Waste of time, waste of effort, waste of money—the man who has never been guilty of these things, if he could be found, would be no fitting company for mere mortals. Governments, after all, as Mill reminds us, "consist of men, and for the most part of very ordinary men," and it is unreasonable to expect that Ministers and officials should be exempt from our common frailties. But there are degrees in all things, and it is better to be dead than to be a "waster," or a wastrel. Gross, palpable, continued waste of public money is something about which the taxpayer is right to be angry. Those who are responsible for spending the public money are in a fiduciary position. We require from trustees not merely the diligence which an ordinary prudent man takes of his own money, but the higher exact diligence of an ordinary prudent man who is dealing with other people's money, which may be a very different matter. Further, while a trustee may not make a profit out of his trust, our Ministers and officials are highly paid to discharge their trust. We may therefore fairly demand of them, at such a time as the present, when we are the most heavily taxed community in the world, that they should, as

they themselves say, "explore every avenue" in the road to economy.

Historians of the War will find abundant proof of the wasteful character of our contribution. The same results might have been attained at a much smaller cost in blood and treasure. "Hang the expense and get on with the war" was a phrase constantly in the mouths of civil and military authorities, though hanging the expense seldom did anything to accelerate the hour of victory, and often tended to retard it. Mr. Balfour's remark that it was the business of admirals and generals to win victories and not to save expense was true in itself, whether or not it was opportune; but Lord Kitchener was never so angry as when he found officers guilty of squandering the public money. Some of the general relief at the Armistice was due to the hope that we should at last see an end of reckless extravagance and get back to rational expenditure. The House of Commons elected in 1918, just after the Armistice, was expected to address itself with energy to the reduction of expenditure and lightening the burden of war taxes. These hopes were lamentably disappointed. The spirit of waste was not exorcised. New heavy taxation was imposed. The annual taxation per head has been worked out by a leading financial journal at £18 in 1919, £22 in 1920, £24 in 1921. Retrenchment has been dilatory and half-hearted. An Anti-Waste movement was started on independent lines to press for such reductions of expenditure as would admit of immediate and appreciable lowering of taxation. Its first candidate gained a striking victory over a Government supporter in the St. George's division of Westminster, which had long been regarded as an impregnable party seat. This election (June 7, 1921) was followed by other similar successes, and Government began to take alarm. As early as August 20, 1919, Mr. Lloyd George had sent a circular to his colleagues pointing out that "the time has come when each Minister ought to make it clear to those under his control that, if they cannot reduce expenditure, they must make room for somebody who can. . . . That is the public temper, and it is right." This was, however, but summer lightning. The Civil Services and Revenue Departments which cost 81·3 millions in 1913–14 cost 523·3 millions in 1920–21 and 590·7 millions in 1921–22. The fighting services cost about 77 millions before the War and nearly 190 millions in 1921–22. The Debt and other Consolidated Fund Services increased in the same period from 37·3 to 359·8 millions.

In May 1921 the Treasury issued a circular to all Govern-

ments on the subject of restriction of expenditure, and indicated that the cost of ordinary Supply Services, fixed at 603 millions for 1921–22, *must* be reduced to 490 millions for 1922–23. Immediate proposals to that end were called for. The response was a proposal to reduce the estimates for the next year not by 113, but by 75 millions. Having regard to the fall of prices, of wages and bonus, and to the cessation of various services arising out of the War, this failure was inexcusable. A Gladstone, a Lingen, or a Welby would not have accepted a rebuff of this nature. But the Treasury and the Chancellor of the Exchequer of to-day did not carry guns enough to make their orders effective. Resort was therefore had to an outside Committee, with Sir Eric Geddes as Chairman and Lord Inchcape, Lord Faringdon, Sir J. P. Maclay and Sir Guy Granet as members. Its terms of reference were :

"To make recommendations to the Chancellor of the Exchequer for effecting forthwith all possible reductions in the National Expenditure on Supply Services, having regard especially to the present and prospective position of the Revenue. In so far as questions of policy are involved in the expenditure under discussion, these will remain for the exclusive consideration of the Cabinet; but it will be open to the Committee to review the expenditure and to indicate the economies which might be effected if particular policies were either adopted, abandoned or modified."

The date of the reference is not stated, but the Committee seems to have got to work in August 1921. At some date after its appointment the Chancellor of the Exchequer asked it "to aim at economies which in the total would effect a reduction of expenditure of 175 millions." In other words it was asked to advise how the Estimates for the Supply Services for 1922–23 could be pared down to 428 millions.

The appointment of the Committee was greeted with loud criticism. It was asked what qualifications five eminent authorities on transport by sea and land possessed for judging how much the British Government should spend on its various services. Sir Eric Geddes was accused of having been himself a "master-spender" as Minister of Transport, and his selection as an economy expert was regarded as a piece of cynicism. In some quarters the Committee was denounced as unconstitutional, though it had no executive powers, and there is no reason—quite the contrary—why the Chancellor should not get assistance and advice from any source. Finally, it was asserted that the Committee was a device to shelve the question and pacify the

taxpayer while action was deferred. When it was known that the Committee had reported, the public was left for some time in doubt whether the Report would be published. When the Reports were ultimately issued they had a wonderful reception. The first editions were rapidly sold out in spite of their very high price. Previous criticisms were forgotten and the Report and its authors were covered with general approval.

Fortunately for itself the Committee was not called upon to express an opinion as to how much the country could afford to spend upon Government—its taxable capacity—nor how much Government ought to pay to carry on its business with efficiency, nor what business Government should attempt to undertake. Its problem was simpler. Given a figure of 428 millions as the amount to be raised for Supply Services, how should the total be divided among the Departments of the State? The answer could not be worked out *in vacuo*. It was not possible to say, *e.g.*, that having regard to our national requirements and to the armed forces of other countries, a sum of so many millions should suffice for the naval, military and air forces. These were already in being with certain commitments, rents, contracts, and other liabilities not to be immediately cancelled except at heavy cost. The empirical process was indicated. How much of the present and proposed expense can be reduced at once? Upon this branch of its inquiry the Committee was advised by Government that it might act upon the assumption that no great war was to be anticipated within the next ten years. Even here, however, its problem was relative and not absolute. Aiming at a total of 428 millions, it was practically compelled to divide its proposals for retrenchment into fractions of 100 millions. It may safely be asserted that, given a free hand, it could and would have made recommendations for a larger cut than that prescribed.

The methods of the Committee were practical and business-like. It inquired how much was spent by each Department before the War, how much is now demanded, what changes of circumstances have affected requirements as compared with 1913–14, and (to some extent) how far defects of organisation are wasteful and remediable. Their reports vividly show the superiority of personal inquiry over the formal examination of witnesses by Estimates and Select Committees of the House of Commons. To pass in review in six months the expenditure of hundreds of millions of money upon multifarious services is only possible by a sort of aeroplane flight over the country,

which shows how the land lies. Photographs will give accurate representations of salient details, and plotting out measurements will yield some definite conclusions. In plain language cost-accounting can be employed on a large scale and with good results. But the small and intimate details are not revealed by this bird's-eye view, and in public finance there are "little foxes that spoil the vines," little leakages in abundance which make Gladstone's candle-ends and cheese-parings important in the aggregate. This kind of work is only possible to spade-working inspection. The work of the Geddes Committee needs to be followed up by some such body as President Taft's Commission on National Economy and Efficiency." [1]

The First Report, dated December 14, 1921, deals with the fighting services, social services (Education, Health, Labour, and Old Age Pensions), and the Ministry of Pensions. In the fighting services overlapping and duplication throughout lead to waste. Co-ordination is recommended in Supply, Transport, Education, Medical and other Services under some supreme authority such as a Ministry of Defence. The Navy Estimates provide for man-power on a lavish scale. Without in any way interfering with the manning of the fighting ships of the Navy, officers and men might be reduced by 35,000. The Royal Dockyards are unduly expensive. There are many ways in which economies could be effected by employing the Naval Ratings and Marines held for mobilisation on the work now done for the Admiralty by civilians and Metropolitan Police. The Naval Estimates for 1922–23 should be reduced from 81 to 60 millions, and in the subsequent year still lower estimates should suffice. Further reductions should result from a judicious substitution of air-power, acting on the proposals of the Washington Conference for discontinuing the construction of four capital ships (for which the Estimates provided 11·8 millions), lowering the number of ships in full or partial commission, and lessening the provision for accumulating and storing oil reserves for the Fleet —a matter of high policy.

In the Army a reduction of 50,000 officers and men could be made in the Estimates without in any way reducing the forces employed by the War Office on foreign service. Drastic economies should be made in all the ancillary and auxiliary services of the Army, which have been increased beyond what the country can afford. Abnormal reserves of arms and equip-

[1] For an account of the methods of this Commission see Higgs, *National Economy*, 1917, *passim*.

ment are stored, guarded and maintained at heavy and unnecessary cost. The introduction of new arms and corps and of the Air Force, increasing our fighting efficiency, is not reflected in corresponding reductions in other directions. The Army Estimates should be reduced in 1922–23 from £75,197,800 to 55 millions, and more thereafter. No account is taken of further possible reductions resulting from a review by the Government of our military requirements at home and abroad. The Report recommends a reduction of the Air Force Estimates from $15\frac{1}{2}$ to 10 millions—the air units allotted to the Navy and Army to be reduced by $8\frac{1}{2}$ squadrons.

Education, upon which 17·2 millions of voted monies were spent in 1913–14, was estimated to cost 59·3 millions in 1922–23. If we add the Local Taxation Grants and the expenditure falling on rates, the total is £103,880,000. The Committee considers that of recent years the national expenditure on Education has far exceeded what the country can at present afford. The cost per pupil has increased unreasonably. The system of subsidy has transferred increasingly the incidence of cost from the ratepayer to the taxpayer and decreased the financial responsibility of those who actually spend the money. The Board of Education is impotent to control expenditure or effect economies, once the policy has been determined, and Local Authorities have been urged into expenditure upon a scale which they would not have contemplated if left free. The pay and superannuation of teachers has been fixed upon an ill-advised and unconsidered basis. The grants for secondary and higher Education are described as excessive, and the Committee concludes by recommending a cut of 18 millions in this Estimate.

The Ministry of Health is more leniently dealt with. Apart from the Housing Scheme, "which is entailing a cost to the taxpayer of 10 millions a year for the next sixty years," and a recommendation of a vigorous policy of sale of these houses to reduce that burden, the Report suggests only a reduction of $2\frac{1}{2}$ millions upon the revised Estimate of $24\frac{1}{2}$ millions. On War pensions it recommends a reduction of $3\frac{1}{3}$ millions in cost of treatment, parents' pensions, and administration. The Estimates for the Ministry of Labour and Old Age Pensions are left unchanged, though possible economies are indicated in the Labour Ministry, and it is recommended that the abolition of that Ministry and of the Employment Exchanges should be considered. In all the First Interim Report suggests specific reductions of 70·3 millions in five public departments.

The Second Report, dated January 28, 1922, and the Third (final) Report, dated February 21, can be more briefly dealt with. They propose further specific reductions in various Civil Service and Revenue Department Estimates, making, with some adjustment of the First Report figures, a total cut of £86,844,175. The Committee expresses confidence that more than $13\frac{1}{4}$ millions can be struck off from the Estimates of the fighting services on the grounds stated at the end of its First Report. It is important to notice that the Committee says, in effect, "Here is your plan for a total of 428 millions to be spent on Supply Services. But our suggested retrenchment is a minimum. There are other reductions possible upon which you should make further inquiry and take action."

The response of the Government was to give effect to reductions of 52 millions only. The Committee proposed a reduction of 21 millions on the Navy, plus any savings arising out of the Washington Conference. It allowed 12 millions for four new capital ships, which cannot be proceeded with this year. The Navy Estimates are nevertheless reduced only by 16 millions in all, or 4 millions if the new ships are excluded. As regards the Army, a reduction of 20 millions was proposed, plus any reductions due to a revision of garrisons abroad. The reduction actually made is about 10 millions, including adjustments of garrisons on foreign service. The cut of $5\frac{1}{2}$ millions proposed in the Air Force has been reduced by about one-half. The Social Services are reduced by 11·7 millions instead of the 22·7 suggested in the Reports. The other recommendations or equivalent reductions have for the most part been adopted, so far as they were specified by the Committee, but its suggestions of further economies have apparently not yet been explored. There is a general feeling that retrenchment has not been sufficiently prompt, nor sufficiently drastic.

A few illustrative examples of waste and mismanagement may be taken from the Reports. In the Transport Companies of the Army the Committee finds 3 officers and 80 of other ranks for a service company of 20 four-wheeled vehicles. Of these men there are 30 drivers or $1\frac{1}{2}$ per vehicle, and 20 cleaners, besides 18 workshop personnel. "We have ascertained the figure with regard to the cleaning staff employed by large Omnibus Companies, and find the ratio in their case is approximately one man for each five vehicles. In the case of large double-decked trams, the ratio is only two cleaners for five cars. . . . There are 11,856 beds in Admiralty and War Office hospitals

in this country, of which 5,335 are filled and 6,521 are unoccupied. The accommodation at Ministry of Pensions hospitals is rather under 14,000 beds, though Treasury authority has been obtained for 15,000 beds, which was a great reduction on the demands made by the Ministry. The number of these beds unoccupied on June 30, 1921 was 2,400. Immediate steps should, in our opinion, be taken to utilise spare accommodation in Naval and Military hospitals for pensioners under treatment, thus enabling buildings hired by Ministry of Pensions to be surrendered. . . . Each patient in a Ministry of Pensions hospital is costing on the average 10*s.* 11*d.* a day, whereas the capitation rate of civil hospitals averages 9*s.* a day. General surgical and medical cases should, to a large extent, we suggest, be treated either in civil hospitals or in Naval or Military hospitals. . . . Altogether the taxpayer is providing 25,856 beds, and of that number 9,821 beds are unoccupied." The Navy has enough ammunition for "twenty years' consumption on the basis of the late War, and yet it is proposed next year to spend close on two million pounds on ammunition alone."

The *insouciance* into which we drifted during the War is strikingly shown by the two cases of pay and pensions of teachers and police. The present scales of teachers' salaries were framed by the Burnham Committee, formed of representatives of the local authorities and the teachers. The taxpayer bears from 50 to 60 per cent. of the increased salaries granted as well as the whole of any consequential increase in pension charges. The bill for teachers' salaries is now more than two and a half times the pre-war figure. The Burnham Report provides that if the official figure of the cost of living rises to a higher level than 170 per cent. above pre-war costs, and remains there for six months, the scale shall be open to increase. It omits, however, any mention of reduction when cost of living falls. The index number at the date of the Burnham Report (September 1920) was 161, whilst it is now 81. Reductions on the ground of the falling cost of living have been accepted recently by most classes of the community, and this process is continuing. The cost of teachers' pensions to the State in 1913–14 was £176,000. It is now nearly two millions a year. "The taxpayer pays the whole pension bill, the Local Authority has control of the pay, the age of retirement and promotion of the staff, but no financial interest in the pensions cost affected thereby—a most vicious principle. The full cost to the taxpayer of the burden of teachers' pensions was clearly not appreciated when the arrangement

was made; in fact, *the Government Actuary was not consulted.* The accruing liability under this head may well amount ultimately to 12 millions per annum."

The present scales of police pay are those recommended by the Desborough Committee, which reported in July 1919. This Committee recommended that the scales of pay of police should be standardised throughout Great Britain. The percentage increase amounts in some cases to 208 per cent. above pre-war, in Industrial Boroughs to 148 per cent., and in the Metropolitan police to 133 per cent. The scales are not subject to any reduction on the grounds of cost of living. "In our opinion, there is no justification for paying a constable in a rural county up to £234 per annum and sergeants up to £292 per annum in addition to the rent aid, boot allowances, free clothing and generous pension terms which are granted to all members of the police force. Their emoluments are exceptionally favourable compared with outside rates in skilled occupations." But the astonishing feature of the pay is that it is the same for County and Borough police as for the Metropolitan force. How the Treasury, which discriminates carefully between the pay of London and provincial postmen, can have consented to extend the pay of London police to the provinces is a mystery. Here again, as in the case of the teachers' pensions, *there was no actuarial estimate* in connection with the Police Pensions Bill of 1921. When a Government Actuary is set up for such purposes these costly leaps in the dark ought not to have been taken without getting his report.

Space fails to add to these extracts. It must suffice to say that they leave an impression that a central brain is lacking in the control of our public expenditure. The Committee of amateurs has given a lesson in method to the professional administrators. It makes them a present of the waste which undoubtedly existed at the time of the base-line of 1913–14, and of the great fall of prices since the provisional Estimates were framed in July last. It creates and confirms a conviction that we are spending large sums of public money for no useful purpose. It is not surprising that another Committee is already demanded by the public, whose "ignorant patience of taxation" is giving way to an enlightened impatience, or that the Indian Government has requested Lord Inchcape to preside over an inquiry into the possibilities of retrenchment in India. Vast dumps and stores of war equipment and material, covering large areas, filling huts and buildings, costing money to guard, check,

audit, and subject to risks of depreciation, establishments at Woolwich, Waltham and Enfield kept going on unremunerative work "in case of emergency," are like insuring against earthquake and neglecting the less remote danger of loss from fire. The financial emergency is upon us. A reserve of financial power is surely of the first importance even as a preparation against war.

The Chancellor, having failed in his duty to make more substantial reductions in public expenditure, was confronted with a difficult Budget. The enormous stocks of surplus war stores, bought out of borrowed money and sold for hundreds of millions, spent as annual revenue since 1918, are coming to an end. The outlook for taxation on the existing basis is affected by the depression of trade, industry and commerce, and by the operation of the three years' average for profits which will now include one bad year. The debt to the United States will require a beginning of payments this year, though only six months' interest—approximately 25 millions sterling. Indirect taxes are falling off. Any additional tax burden is unthinkable. If taxation is not reduced the public indignation will boil over. How then to solve the problem?

Opening his Budget on the 1st of May, the Chancellor stated the outturn of 1921-22 as compared with the Budget estimate:

Revenue;	estimated	£1,216,000,000,	realised	£1,124,880,000
Expenditure;	,,	£1,136,000,000,	actual	£1,079,187,000
Surplus	,,	£80,000,000,	,,	£45,693,000

The National Debt had increased from £7,574,358,000 on the 31st March, 1921 to £7,654,500,000 on the 31st March, 1922, owing to the issue of the $3\frac{1}{2}$ per cent. Conversion Loan which increased the nominal total debt, but not the annual debt burden. The external debt, floating debt, and early maturing debt had been much reduced, so that it has been possible to reduce the estimate for interest and management of debt from 352 millions in 1921-22 to 335 millions for the present year. On the existing basis of taxation the revenue for 1922-23 was estimated at 956·6 millions, of which 90 millions are special revenue. The total expenditure, exclusive of debt redemption, is estimated at 910 millions, made up of £363,438,000 for Consolidated Fund Charges and £546,631,000 for Supply Services. In this total of 910 millions are included £61,200,000 for special expenditure, and 25 millions for contingencies. Various Irish services are now omitted. The total amount is not clear; but over 23 millions of expenditure are specified in the memorandum on Civil Service

Estimates (II. of C. 32, of 1922) as transferred from the Imperial Parliament. When we get the true figure we shall be better able to compare the expenditure of the past and the present year.

The Chancellor proposed to reduce the standard rate of Income-tax by 1*s*. in the pound, which means roughly by one-sixth —those who now pay 3*s*. to pay 2*s*. 6*d*., while the full standard rate becomes 5*s*. instead of 6*s*. The duty on tea, coffee, chicory, and cocoa to be reduced by one-third as from the 15th May. Imperial growths enjoy a preference. The duty on China tea now becomes 8*d*. per pound instead of a shilling, while imperial teas will pay 6⅔*d*. per pound. Coffee and cocoa will now pay 4*d*. per pound. Postal and telephone charges are reduced. Postcards reduced from 1½*d*. to 1*d*. Printed papers, subject to certain conditions as to hours of posting, reduced from 1*d*. to ½*d*. on packages not exceeding 1 oz. in weight. Letters (minimum weight) reduced from 2*d*. to 1½*d*. Reductions in telephone charges amounting to about 1 million a year. Agricultural land to be assessed for Income-tax at its annual value instead of at twice that amount, and amenity lands at one-third of the annual value. The estimated cost of these concessions for the year is—Income-tax, etc., 35·2 millions; tea, coffee, etc., 5 millions; postal charges, £5,650,000. Some minor changes are promised to meet Income-tax hardships and defects. Sunday postal collections (but not deliveries) are to be restored at a cost of about a quarter of a million for the year. On the basis of these proposals the final balance sheet is: Revenue £910,775,000; Expenditure £910,069,000, leaving a balance of £706,000. Provision for Sinking Fund is not made, and the amounts needed to meet the statutory requirements in respect of Victory Bonds, 3½ per cent. Conversion Loan, etc.—probably 30 to 35 millions—will have to be borrowed during the year.

These are the main features of the Budget, which has been fittingly described as a makeshift. The gravity of over-taxation is recognised in the Budget speech. "Nearly every item in Customs and Excise has fallen off in yield in the last three or four months. The opinion I have formed is that while consumption kept up in a remarkable degree during the course of the year 1921, the savings of the people gradually became exhausted, and the spending power is now curtailed." "Unemployment is widespread. It is breaking the hearts and embittering the lives of hundreds of thousands of our workmen. The professional and middle classes are enduring privation to-day such as they have never before had to face." "The evils of a high Income-tax in relation to commerce and industry have

been emphasised and confirmed by our recent experiences." But the problem is attacked at the wrong end. In 1918 Mr. Bonar Law, as Chancellor of the Exchequer, forecast our post-war Budget at 650 millions. A year later his successor, Mr. Austen Chamberlain, laid down a total of 766 millions for a normal year. The present Chancellor only last autumn called upon the Geddes Committee to prepare figures for a total of 428 millions for Supply Services. The new Budget provides (after excluding various Irish services) for an expenditure of over 910 millions, of which 546·6 millions are for Supply Services. The conclusion is inevitable—there has been and still is deplorable slackness in retrenchment. It is of no use to pay glowing tributes to the strength of the patient and to the wonderful vitality which has enabled him to survive such drastic bleeding in the past year, nor to point out with pride the reductions which have been effected in expenditure. We should rather view with contrition the huge expenditure which remains. Part of it is due to bad politics, part to lack of knowledge and lack of vigour in administration. A Budget is but a programme, and programmes do not always work out according to plan. It will be an agreeable surprise if contingencies do not require more than the 25 millions provided for Supplementary Estimates. On the other hand, the fall of bonus may possibly be much more than is anticipated in the Budget. The immediate relief to the taxpayer is very slight, seeing that the Income-tax instalment due on the 1st July will be collected at the old rate, and the new rate will not be applied till 1923. The remission of £45,850,000 in the present financial year will amount to 20 millions more in a full year. The outlook for the 1923–24 Budget is black indeed, unless a much more vigorous policy of retrenchment is adopted and carried through. The Geddes Reports give us a foretaste of what might be attained by a properly organised efficiency audit. A single expert Inspector General, with two or three assistants, working on similar lines to the Geddes Commission and reporting annually to the House of Commons, would throw the searchlight of publicity and knowledge into the dark places of waste.

Expenditure being what it (unjustifiably) is, the suspension of the Sinking Fund, of which we should be ashamed four or five years after the Armistice, appears on the whole a lesser evil than the maintenance of taxation at its old killing rate. That we should have been brought to this pass is a terrible proof of woeful mismanagement.

A word of praise is due to the improvement in the White

Paper (Financial Statement) 77 of 1922, which is much fuller and clearer than usual. Little is heard of the concealed charge of accruing interest on the National Savings Certificates, which must now amount to a substantial liability. The decision to make Departments pay for Post Office telegrams is a retrograde step. If extended to stationery and other charges we shall soon see not only a complication of accounts, but an army of clerks engaged in correspondence with each other over questions of excessive charges, inefficient service, and similar matters, without any corresponding benefit to the public. Simplification of the public services is so essential that a discredited and discarded system of inter-departmental payments ought not to be lightly revived because of slight defects which cost more to remove than the change is worth.

The following is the "final balance-sheet, 1922–23, after alterations proposed by the Chancellor of the Exchequer":—

ESTIMATED REVENUE.	
Customs	£112,250,000
Excise	160,750,000
Total Customs and Excise	273,000,000
Motor Vehicle Duties	10,600,000
Estate, etc., Duties	48,000,000
Stamps	18,250,000
Land Tax, House Duty, and Mineral Rights Duty	3,000,000
Income Tax (including Super Tax)	329,000,000
Excess Profits Duty, etc.	27,800,000
Corporation Profits Tax	19,750,000
Total Inland Revenue	445,800,000
TOTAL RECEIPTS FROM TAXES	£729,400,000
Postal Service	35,667,000
Telegraph Service	5,230,000
Telephone Service	13,728,000
Total Post Office	54,625,000
Crown Lands	750,000
Interest on Sundry Loans	14,000,000
Miscellaneous:—	
Ordinary Receipts	22,000,000
Special Receipts	90,000,000
TOTAL RECEIPTS FROM NON-TAX REVENUE	£181,375,000
TOTAL REVENUE	**£910,775,000**
Borrowings to meet Expenditure chargeable against Capital	**£10,050,000**

ESTIMATED EXPENDITURE.	
CONSOLIDATED FUND SERVICES.	
National Debt Services	£335,000,000
Payments for Northern Ireland Residuary Share, etc.	2,500,000
Road Fund	10,000,000
Payments to Local Taxation Accounts, etc.	9,788,000
Land Settlement	3,500,000
Other Consolidated Fund Services	2,650,000
TOTAL CONSOLIDATED FUND SERVICES	**£363,438,000**
SUPPLY SERVICES.	
Army	62,300,000
Navy	64,884,000
Air Force	10,895,000
Civil Service	317,455,000
Customs and Excise and Inland Revenue Departments	12,275,000
Post Office Services	53,822,000
Provision for Supplementary Estimates	25,000,000
TOTAL SUPPLY SERVICES	**£546,631,000**
TOTAL EXPENDITURE	**910,069,000**
Surplus	706,000
TOTAL	**£910,775,000**
Expenditure Chargeable against Capital	£10,050,000

Since the above article was written a letter from Sir Henry Gibson has appeared in *The Times* (May 18, 1922) recommending that the House of Commons should appoint a Select Committee on the lines of the Geddes Committee with power to appoint from outside suitable persons to serve on sub-committees and an expert secretariat. The ability and long experience of Sir Henry Gibson as Comptroller and Auditor-General lend great weight to his assertion that a staff at no greater cost than £10,000 a year would adequately perform the duties contemplated and bring about economies out of all proportion to its cost. "The House of Commons should assert itself in this matter, and disregard the threadbare objections put forward by Ministers, such as the weakening of Ministerial responsibility and the sapping of Treasury control. Ministers of spending departments require all possible control, and the Treasury, even in its palmiest days—as admitted by its representatives in evidence—has never been able to exercise an adequate check on the demands of the fighting services." An Examiner of Estimates is, in my opinion, less likely to be useful than an Examiner of past and present waste. To tell the Minister of War, *e. g.*, that the Army has five cleaners of vehicles where one would do is a measure of assistance rather than "control." An *ex post facto* study of expenditure which reveals waste is more important and more practical than scrutiny of future and possibly new requirements.

HENRY HIGGS

OBITUARY

Professor Sir Edward Gonner

THE death of Professor Sir Edward Carter Kersey Gonner on the 25th February last is a severe loss to economic science, and will be regretted by a very large circle of friends and of colleagues in his academic and administrative work. It occurred very suddenly as a result of a short illness attacking him at a time when he seemed to be in the best of health.

Gonner was one of the economists whom Oxford, in spite of having till recently given scanty recognition to economic studies in its curriculum, has contrived from time to time to produce. His first teaching appointment was at University College, Bristol. in 1885. Thence he went to the newly founded University College of Liverpool in 1888, and with successive changes in the status

of the institution, of economic studies there, and of himself as their principal teacher, remained at Liverpool till his death. For the last thirty years he had held the position of Brunner Professor of Economic Science.

Latterly, a large part of his time was spent away from Liverpool and in other than academic work. Very shortly after Lord Rhondda's appointment as Food Controller in the summer of 1917, Gonner joined the staff of the Ministry of Food as Economic Adviser, becoming later Director of Statistics. He remained at the Ministry during the whole of the rest of its existence, both before and after the Armistice, and, after the transference of its functions to the Board of Trade, continued to give such service as was required. His impartiality, judgment, and knowledge of affairs were recognised also as qualifying him admirably to act as an Arbitrator in industrial disputes, and he was for some years one of the Chairmen appointed for this purpose by the Ministry of Labour in connection with the "Committee on Production," which, starting in 1915 as a Committee of Enquiry, became ultimately the main instrument for compulsory arbitration under the Munitions Act.

Gonner's writings covered many distinct sections of the wide field of Economics. In the domain of theory he wrote in 1906 a small but excellent volume on *Interest and Saving*, notable for its full recognition of the complexity of motives to saving, while one of his first publications was an edition of Ricardo's *Principles of Political Economy* (1891). Another early work, on *The Socialist State* (1895), is of a more popular character, while his *Commercial Geography* (1894) is frankly a school text-book. In writing of *The Social Philosophy of Rodbertus* (1899) he made a valuable contribution in yet another field. But it is as an economic historian that he most definitely made his mark. His account of the modern economic development of Germany contributed to a *History of Germany in the Nineteenth Century* by various writers (1912) is an admirable short piece of work. His volume on *Common Land and Enclosures* published in the same year is the main authority in this field, standing out, by its balance and restraint, from a mass of biased and controversial literature, and distinguished from most scientific work on the subject by its completeness and by the length of the period covered. Dealing with three centuries and not with a few decades only, Gonner shows, more clearly than any other writer, the continuity of the process of enclosures and, in a sense, its inevitable character.

Gonner belonged to the period before the high specialisation

of Economics. He worked in many different fields. If thereby he diminished to some extent his chance of being remembered as the ultimate authority on a single, possibly obscure, branch of his subject, he is more likely to be remembered in other ways.

He was a man of affairs as well as a professor. He showed this over many years of work in the development and administration of the University of Liverpool. He showed it still more definitely when the sharpest test came of all men's abilities, in the World War. In the Ministry of Food he was an officer whom Lord Rhondda, assuredly no mean judge either of men or of affairs, distinguished not only by the greatest respect for his judgment, but by marked affection. To Gonner Lord Rhondda spoke about the problems, the schemes and the personnel of the Ministry of Food more freely than to almost any one else, and he was one who by broad tolerance, discretion, lack of self-seeking, and appreciation of many different classes of men, most deserved such confidence. He was one of the men of academic training who most conspicuously made good in practical administration during the War. This was deservedly recognised by the successive honours of the C.B.E. and the K.B.E which he received.

At the time of his death he was only in his sixtieth year. Though he might retire from active academic work it looked as if he had many years of reflection, of study, and of writing before him, and as if in those years he might have done invaluable service to economics, by placing on record some of his experiences, and drawing lessons from his practical work in the War.

He was a member of the British Editorial Board established by the Carnegie Endowment for the purpose of securing the production of an economic and social history of the War period. His colleagues on that Board are only too well aware of his value there, and of the loss that they have suffered. He had compiled a volume on Food Statistics, which will shortly be published by that Endowment, and was preparing, in collaboration, a History of Food Control. Those who realise the difficulty of getting adequate contemporary histories written, because it is seldom that professors have the chance of doing practical work, or that practical persons can write good books, will best understand how much was to be hoped in this sphere from the fortunate combination of qualities which distinguished Gonner. His death was in every way untimely: untimely since it defeated this hope; untimely because it came at so early an age; and untimely as the death, at whatever age, of such a man as Gonner, must seem to all who have known him and who will miss in him one of the

most delightful and most desirable of companions, whether at a Board of Examiners, or in a Food Council or on a holiday expedition.

W. H. Beveridge

Henry Carter Adams

Henry Carter Adams was born in Iowa, December 31, 1851. He came of New England Puritan stock on both sides. One of his ancestors on the paternal side settled at Cambridge, Massachusetts, in 1623. His father was a member of that enthusiastic group of Andover theological students who went in 1843, almost on foot, from New England to the wilderness, as it existed in Iowa in those early days, in order to spread the gospel. It was this little "Iowa band" of Congregationalists that was largely instrumental in founding Grinnell College, the first college in Iowa. Because of a past liberal donation from a Mr. Carter of New England, which made possible the starting of the college, Henry received the middle name of Carter.

Reared in the intense religious and intellectual atmosphere of Puritan missionary life, he was destined for the ministry. He was delicate as a boy, and at one time it was even doubtful whether he could endure the rigour of the Iowa winters and the discomforts of frontier life. He was compelled on account of his physical condition to live much in the open, and for years he traversed the rolling prairies with gun and horse, seeking to acquire the strength which was so sorely needed, and laying the foundation for that passionate love of nature which characterised him in later life. As a consequence, his early education consisted almost entirely of the training in the languages that his father was able to impart to him—Greek, Latin, and Hebrew. After a time, however, he found it possible to go to Denmark Academy and to attend Grinnell College, from which he graduated in 1875. At that time he still intended to devote himself to the ministry, and accordingly entered Andover Theological Seminary in 1876. Then, however, moved by the spirit of the age, he had his attention turned to social questions and he determined to study economic science, not so much for itself as constituting an avenue through which to reach his goal of ethical reform.

It was now that by chance he heard of the founding of a new institution at Baltimore, the Johns Hopkins University. Having determined to enter it, he wrote on a few days' notice an article in competition for one of the new fellowships, and he was

fortunate in being among the ten, out of more than three hundred applicants, to receive a fellowship. This took him to Baltimore, which was a revelation to him. There it was that he mingled with the galaxy of remarkable men who were associated together as teachers at Johns Hopkins; there it was that he first saw something of the life of the factory worker; there it was that he revelled in the opportunities for music and art, for which he had long been silently longing, but which he had been unable to find in his country home. Thus he developed into the man as he was when we came to know him a few years later. After attaining his doctor's degree in 1878, he decided to go abroad in order to secure his advanced training in economics and social science. He studied at Oxford, Paris, Berlin, and Heidelberg for two years, and there acquired a familiarity with the newer methods and outlook which were to differentiate the young acolytes of economics on their return to America.

Curiously enough, he was started out on his career through a mistake. Andrew D. White, the President of Cornell University at Ithaca, New York, was at that time American Minister to Berlin, and was exceedingly kind to the American students who were pursuing their work in Germany. He had met Adams there, but only casually; and when at a watering-place in Germany he sent for Adams in order to discuss with him the possibility of doing some work at Cornell. He had, however, intended to send for the other Adams—Herbert B. Adams, the historian—and it was only after some little time that Henry discovered the mistake. He did not, however, give up the fight. Mr. White was at that time also interested in economic questions, and when Adams said he thought that he had a message to give to the students at Ithaca, Mr. White asked him to draw up a syllabus. *Adams worked all night and handed in his syllabus* in the morning, with the result that when he returned to this country, he received an invitation to deliver lectures not only at Cornell, but also at Johns Hopkins and at Michigan.

It was during these years that he still pursued his main quest of getting economics and ethics in some way to align themselves together. Yet, it may be asked, how did it happen that his first book should be devoted to a subject so uninteresting (as it seemed at that time) as that of public debts? He told me the story once—it is this; Adams was very ambitious and eagerly desired to make a reputation. At the same time he knew that his advanced views on social reform were not wholly approved by a great number of people. He therefore determined to seek

a topic which would possess two characteristics—first, that virtually nobody else in the country would know anything about it; and second, that it would not involve any question of radicalism in social policy. He cast about for some time and finally selected this particular subject. That explains why he started out with public finance, and after five years' strenuous application made, as he had hoped, a ten-strike with his admirable book on public debts, published in 1887.

In the meantime, he had never forgotten his first love. One of his very earliest papers—"The Relation of the State to Industrial Action"—was originally an address which was delivered before a club in New York in trying to make the lawyers and business men realise the close connection of economics and ethics. When published as a monograph by the American Economic Association in 1886 it at once made a profound impression. He emphasised what has now become a commonplace—the need of raising the level of competition. This desire to make people realise that they move upward and onward solely through moral achievement, can be illustrated by an important episode. During the early days of the Gould railroad strike in 1886 there was to be at Cornell University a discussion of the subject. The engineer who had been invited could not be present, and at a moment's notice Adams was asked to step into the breach and address the students. He spoke in his accustomed lucid way, and, as he afterwards put it, he said it was the first time he had ever talked to so large an audience with a realisation that he was making an impression, and that his audience was being influenced by his opinions. Unfortunately, the daily papers took the matter up and, in their usual fashion, gave a distorted version of his talk. The upshot was that Mr. Henry Sage, the great benefactor of Cornell, came to President White and said: "This young man must go. He is undermining the very foundation of society." President White very reluctantly concluded that he had no alternative but to acquiesce. The alumni at once desired to make a test case. But Adams refused to allow this. It is to the everlasting credit of President Angell that immediately after this episode he extended to Adams an invitation to associate himself permanently with Michigan University. As a consequence Adams packed his tents and withdrew silently from Cornell. Four years later he received from the Cornell Board of Trustees, of which Mr. Sage was still a member, an unanimous invitation to return. But he had now struck such deep roots at Michigan that he declined the invitation.

Adams' subsequent career was a distinguished one. It was now that he gathered about him a band of students who admired and loved him. But he was soon called upon to render very important public service. When the Interstate Commerce Commission was organised in 1887 and Chief Justice Cooley was summoned to the head, Cooley saw that one of the fundamental objects to be accomplished was the collection of statistics. He accordingly invited his young colleague, Adams, to Washington. As we all know, by the end of the century virtually the only thing that remained of the vast volume of labour attempted by the Commission during the first decade of its existence was the work that Adams had accomplished. Although section 20 of the new law required annual reports from the railways and prescribed the items that should be included, the Supreme Court held that there was no procedure provided to enforce compliance with the section and no penalty for refusal to comply. Moreover, each carrier was keeping its own accounts in a different way, and it became exceedingly difficult to formulate any accurate summaries on such disparate material. When the railway law of 1906 was under discussion in Congress, Professor Adams succeeded in inserting a much more drastic provision. Almost no attention was directed to this point, as the discussion in Congress was centring around the far more important question of the rate-making power. When the law went through, the railways found, to their consternation, that reports had now to be submitted under oath, with severe penalties for non-compliance. Above all, the commission was now given power to establish a uniform accounting system for all the railways and to create a board of examiners to see that the accounting regulations were obeyed. This gave Adams his desired opportunity. A long series of conferences now ensued with a committee of twenty-five of the American Railway Accounting Association. Out of this there gradually emerged the uniform accounting system that we now have. Professor Dixon, of Princeton University, attended many of these meetings and writes as follows:

> "The discussions were frequently very earnest and the tension was often severe, but always at the crucial point in the discussion Mr. Adams would inject the right word and would restore the temperature of the room to normal. Such was his kindly tact, and so great was their respect for his judgment and his singleness of purpose that he almost always carried his point."

The uniform accounting system that Adams thus created was

subsequently extended to other public utilities and remains a monument to his labours.

So great was the reputation that Adams acquired in this way that he was summoned a few years later by the Chinese Government to act as its adviser in working out for them a system of accounting adapted to the Chinese system of railroads. Adams went to China in 1913 and continued for four years to work out the system. Shortly after his death the Chinese Government sent a representative who placed, on Washington's birthday, February 22, 1922, on Professor Adams' grave a monument and memorial tablet to commemorate his services. The memorial address was made by Dr. F. Chang, a member of the Chinese delegation to the Arms Conference at Washington. Herewith are a few paragraphs from the address:

"No estimation of his services can be final without making mention of the unique nature which characterised them and which flowed from the high purpose and noble character of the man. China has had many and varied advisers, who have served relatively longer years. Their results, however, have not been so monumental, and in some cases have not been happy. Professor Adams, on the other hand, worked with and advised the Chinese members of the Commission on the Unification of Accounts, helped them in the production of a body of rules, and left the work entirely in the hands of the Chinese. Such disinterested service and achievement commands universal respect and the love of the Chinese people.

"Though the problems of China were new to him, yet with his scientific grasp and weight he had a thorough comprehension of them. He was also not lacking in human sympathies. He had such an understanding of the Chinese mind and ways that he readily sympathised with them and found working with them congenial and productive of good. His efforts and contacts so endeared him to those with whom he worked that they not only revered his knowledge, but also loved him as a man. In view of China's financial and economic problems, had he been alive, the Chinese Government would have further occasion to seek his services again.

"The relation between America and China has always been friendly, and the feeling between the two peoples has always been cordial and kind. Professor Adams will stand out in history as one who has strengthened those bonds which unite these two nations, who has induced the feeling of confidence between nations and set the example for international co-operation and advancement."

Notwithstanding his busy life as a college instructor and as Government adviser, Professor Adams always remained true to

his original inclinations, as is evident from the fact that for several summers he delivered lectures on ethics and economics in the Plymouth School of Applied Ethics, connected with the Society for Ethical Culture. Adams perhaps contributed as much to the success of that school as any of the more specifically ethical teachers. No one could associate with him, even for a short time, without being profoundly influenced by his fine personality.

A word may be added, in conclusion, as to his scientific achievements in public finance. His book on *Public Debts*, published in 1887, quickly became a classic. It was next followed by a more comprehensive work. Adams was the first American scholar to write a treatise on that topic. It is true, indeed, that, influenced by his continental training, he made an unsuccessful attempt to re-christen the subject, calling his book, after continental precedents, *The Science of Finance*. To-day, however, we wisely distinguish between public finance and private finance. So far as the content of the work is concerned, however, it was a remarkable performance, and like its predecessor on *Public Debts*, shot through with the American spirit. Adams here again very clearly showed that he was, above all, a thinker. This was so widely recognised that his colleagues elected him, after John Bates Clark, to the Presidency of the American Economic Association, thus confirming the general verdict that he was after Clark the ablest thinker of the time in this country. His book on finance is, indeed, an eminently thoughtful book. Written a generation ago, it is now somewhat out of date, but at the time it was a pathfinder. Had Adams had the opportunity, had his attention not been diverted to the other more insistent work, to which allusion has been made, he would have continued in his chosen field. Even recently, he told the writer—as we talked over his plans together—of his project for a new edition of his book. He never lost interest in the problems of Public Finance. He felt convinced that they were the most important questions that confronted us. Yet because of his other pressing engagements, he was unable to maintain in the science the primacy which he had so quickly achieved.

Yet as I look back upon the many years of intimate association with him, I should say that far more important than the scientist was the man. He possessed remarkable qualities as a friend—not to speak of those as a husband and as a father. He endeared himself to everyone who knew him, and his students, above all, had the greatest possible affection for him. This is evident from

the tributes paid to him at the memorial meeting held in his honour at the recent Pittsburgh session of the American Economic Association, which will shortly be published.

When the history of Economics comes to be written, I think it may be said without peradventure of doubt that Adams will occupy a place in the forefront of the ranks of American economists. In public finance, in railroad transportation, in industrial regulation he made notable and permanent contributions to economic science. To those who were privileged to enjoy his friendship, Henry Carter Adams will ever remain the embodiment of all that is gracious and loyal and fine.

EDWIN R. A. SELIGMAN

Columbia University,
April 15, 1922.

CURRENT TOPICS

THE following have been elected to membership of the Royal Economic Society:—

American Geographical Society.
Barber, A. V.
Belshaw, H.
Brown, G. H. J.
Bruguier, Dr. G.
Brunner, Mond & Co., Ltd. (compounders).
Buxton, W.
Choudhari, D. G.
Clark, Sir Ernest, C.B.E.
Clark, L. D.
Cockroft, E. A.
Coyajee, N. H.
Dix, A. N.
Elsas, Dr. M.
Elston, J. S.
Federal Reserve Bank of San Francisco (compounders).
Forsyth, D. A.
George, Mrs. M. D.
Hobson, A. S.
Howland, F. W. S.
Islamia College, Lahore.
Jenkins, E. I.
Kemshed, D. S.
King, A. W. Waterlow.
Knight, Prof. F. H.
Knight, P. A. R. (life).
Knox, W. E.
Lancaster, H.
Lawley, F. E.
Lazard Brothers & Co., New York.
Lee, W. W. (life).
Lipson, E.
Mactaggart, Miss C. S.
Masuchi, Y.
Mawas, Dr. A.
Mellersh, H. E. L.
Menon, A. G.
Mohideen, C. S.
Morris, W. E.
Misra, L. N.
Mukerjee, S. (life).
Mustoe, N. E.
Naish, H. W., M.B.E.
Otter, W. H.
Palmer, J. B.

Pink, H. J.
Rao, B. R.
Rees, W.
Richardson, J. H.
Robinson, H. M.
Russell, A. W.
Sato, K.
Scott, H. C.
Scott, J. P.
Spruill, C. P., Jr.
Stuart, T.
Thompson, G. F.
Towers, J. (life).
Venkataraman, V. A.
Walker, T. C.
Wallett, N.
Wood, D. R.
Williams, D. O.
Wills, F.
Young, E. Marshall.

The following have been admitted to library membership :— University of Southern California Library; University of Syracuse Library; Russell Sage Foundation Library; Radcliffe College Library, Mass.; Massachusetts Institute of Technology Library; Carnegie Free Library of Allegheny, Pittsburgh; Yale University Library; University of Toronto Library; Provincial Library, Victoria, B.C.; State Agricultural Library, Wageningen, Holland; Union des Fonctionnaires du Ministre des Finances; Detroit Public Library; Milwaukee Public Library.

The British Association meets this year at Hull, and not at Edinburgh, as announced by a slip in the March JOURNAL.

The "Manchester Guardian Commercial" is publishing a series of Special Supplements on *Reconstruction in Europe* under the editorship of Mr. J. M. Keynes. Number one deals primarily with the Foreign Exchanges, number two with Shipping and Inland Water Transport, and number three with the Genoa Conference, Textiles, and Austria. Number four will deal with Russia and Oil; number five with the National Finances of Europe and Tariffs. The leading authorities of all countries are contributing. An important feature of the Supplements is the publication of a "Barometer" and Charts of Business Conditions prepared at the *London School of Economics* under *Professor* Bowley.

RECENT PERIODICALS AND NEW BOOKS

Journal of the Royal Statistical Society.

JANUARY, 1922. *The Progress of British Agriculture:—Presidential Address for* 1921–22. SIR HENRY REW. A larger quantity of food was probably being produced at the outbreak of war than at any previous period. A recovery from the set-back due to the war, if not attained, may be hoped for. *Industrial Morbidity in Great Britain.* E. A. RUSHER. In the *Miscellanea* important contributions to the theory and use of the Pearsonian test for "goodness of fit" are made by R. A. FISHER and G. UDNY YULE.

MARCH. *Some Current Financial Problems.* H. W. MACROSTY. The problems dealt with in the paper and in the subsequent discussion by Sir J. Stamp and others related mostly to credit—bank-credit, Treasury Bills, etc. *The Federal Reserve System of the United States.* R. G. HAWTREY. A lucid account of the reform in the United States Banking System. *Wholesale Prices of Commodities in* 1921. THE EDITOR OF THE STATIST. The Sauerbeck (total) Index-number was for 1921, 155; for 1920, 251; for 1913, 85 (for 1867—77, 100). *Francis Galton.* SIR HENRY REW. A centenary address.

The Quarterly Review.

APRIL, 1922. *The Problem of Modern Industry.* A. E. ZIMMERN. Nineteenth-century Socialism has failed. Guild Socialism and Syndicalism are unworkable. Leisure, secured by shorter hours, will not much benefit the factory worker, "too tired to love or hate," after his "dehumanising" work. Recalling Ruskin and Morris, the writer hopes for a transformation from the motive of profit to that of service. Aiming at freedom defined as the "continuous possibility of initiative" (Graham Wallas), he recommends establishments like the York Cocoa Factory, team work, change of employment, publication of profits, removal of stigma from certain occupations—which may be accomplished by industrial conscription as conceived by William James and practised in Roumania. *Prospects of Agriculture.* SIR HENRY REW. Referring to recent publications, official and other, Sir Henry regards the alleged failure of the present system to maintain production as not proven. Whether the system should be retained depends on the adoption of certain readjustments.

The Contemporary Review.

APRIL, 1922. *The Private Use of Money.* PROF. A. C. PIGOU. A guide to conduct. *Free Trade and the Wheat Supply.* LORD SHEFFIELD.

The Banker's Magazine.

MAY, 1922. *Reluctance to Receive.* HAROLD COX. Bastiat's Petition of the Candle Makers is applicable to those who apprehend that receiving an indemnity will be injurious to home industries; since there is no danger of its coming with a rush. *Inter-Allied Debts and Reparation Payments.* F. C. GOODENOUGH.

The Irish Economist (Dublin).

FEBRUARY, 1922. This number is No. 2, vol. vii., of the quarterly which used to be known as *Better Business.* It has now changed a name which, though taken from, did not adequately suggest, Sir Horace Plunkett's formula for the Co-operative ideal: "Better farming, better business, better living." The present number contains *Matters of Moment.* PAUL GREGAN. On Irish eggs. *The Co-operative Movement of To-day.* HENRY W. WOLFF. The movement is specially promising in Germany. *The Irish Pig Trade in 1921.* T. P. SMYTH. *The Woman with the Basket.* MARGARET LLEWELYN DAVIES. The problem of connecting consumers and agricultural combination may be solved in Ireland. *Co-operation in Roumania.* DIARMID COFFEY. *Co-operative Production,* V. CRUISE O'BRIEN.

International Labour Review (Geneva).

APRIL, 1922. *A Thirty-year Experience in Industrial Democracy.* JOHN P. FREY. The experience of industrial self-government in the store industry of the United States. The creation of Joint Committees in 1891 has eliminated strikes and locks-out. *Industrial Welfare Work in Great Britain.* ELIZABETH D. NEWCOMB. The relations of welfare work to Whitley Councils and Trade Unions, the promise of the work to act as a link between employer and employees, are set forth by the President of the Welfare Workers' Institute. *Collective Agreements in Germany.* The system of bargaining between associations of employers and groups of workmen which has greatly developed since the war tends to industrial peace.

MAY. *Vocational Guidance.* E. GAUTHIER. *Accident Prevention by the United States Bureau of Mines.* H. FOSTER BAIN.

Quarterly Journal of Economics (Cambridge, Mass.).

FEBRUARY, 1922. *Agriculture in Eastern Europe.* E. DANA DURAND. Population in excess of the available land as now cultivated was the main cause of pre-war poverty, and damps the hope of recovery from the losses and discouragements due to the war. *An Extension of Value Theory.* DAVID FRIDAY. The classical theory is moribund. Actuarial determination of the present value of future receipts, valuation for purposes of rate-making and for other purposes are not identical with *prices.* *International Trade under Depreciated Paper: The United States, 1862–79.* F. D. GRAHAM. The theory of international trade, propounded by Prof. Taussig in the *Quarterly Journal,* May, 1917, is verified by an examination of commodity prices, international loans, wages and other economic phenomena. *Enforced par Remittance under the Federal Reserve System.* COLSTON E.

WARNE. *The Rent of Mineral Lands.* J. E. ORCHARD. Referring to leading economists, the writer argues that only that part of the royalty which is compensation for the mineral taken from the land enters into price, and inquires what would be the effect of abolishing royalties.

American Economic Review (Cambridge, Mass.).

MARCH, 1922. *The Economist's Spiral.* J. H. HOLLANDER. The influence of economists has undergone vicissitudes; it was unduly small in America during the late war. *The State of our National Finances.* E. R. A. SELIGMAN. If the "mad race for armaments" is stopped and budgetary economy is practised a sound fiscal system may be anticipated. *Business Teaching by the Case System.* W. B. DONHAM. *Social Studies in Secondary Schools.* COMMITTEE ON TEACHING OF ECONOMICS. *The Revenue Act of 1921.* ROY G. BLAKEY.

Journal of Political Economy (Chicago).

DECEMBER, 1921. *The English Building Guilds.* GARFIELD V. COX. An appraisement of the experiment. *The Limitations of Foreign Credits.* H. G. MOULTON. Large extension of American loans to Europe is deprecated. *Proposed Reforms in the System of Food Distribution.* R. CAMP.

FEBRUARY, 1922. *Social Studies in Secondary Education.* COLLEGIATE SCHOOLS OF BUSINESS. *The Revolutionary Cycle in Syndicalism.* D. H. MACGIBBON. *The Incidence of Compulsory Insurance of Workmen.* H. GUNNISON BROWN. The premiums are paid out of wages. *The Economic Importance of the Commercial Paper House.* W. MCAVOY. *The Psychology Course in Business Education.* Z. CLARK DICKINSON. On the use of psychology in business. *New York Bank Reserves and Loan Rates.* L. H. SELTZER and S. L. HORNER. The correlation between the two phenomena is calculated after the manner of Pease Norton.

APRIL. *Succession Duties in Canadian Provinces.* W. C. KEIRSTEAD. *The Minimum Wage in Canada.* KATHLEEN DERRY and PAUL H. DOUGLAS. The laws and rulings in five States which have adopted the minimum wage are analysed. *Recent Cases in Price Maintenance.* W. H. SPENCER, H. CARTER ADAMS, S. L. BIGELOW and others. *French Finances and Economic Resources.* W. E. ATKINS. *Russian Wage Systems under Communism.* AMY HEWES There is much in the systems that is objected to by labour in capitalistic countries.

Political Science Quarterly (New York).

MARCH, 1922. *A Progressive Tax on Bare-land Values.* J. R. COMMONS. *Sources and Methods in Economic History.* W. L. WESTERMANN.

Journal de Économistes (Paris).

FEBRUARY, 1922. *La Banque de France.* YVES GUYOT. *Le progrès britannique en psychologie industrielle.* C. B. STILES. Referring to Lord Henry Bentinck's and other works on *Industrial Fatigue* to the Whitley Committee, etc. *Le rôle de l'état aux Colonies.* R. DOUCET.

MARCH, 1922. *Questions de "l'Ingénu."* YVES GUYOT. On the inconsistencies of politicians respecting Reparation, Protection, etc. *Marine militaire Budget et arsenaux.* H. LE MARQUAND. *Emprunt du crédit National en* 1922. A. BARRIOL et I. BROCHU. Bureau of Labour Statistics (Washington), No. 285: *Minimum-wage Laws of the United States.* LINDLEY D. CLARK, Washington.

APRIL. *Le pétiole.* YVES-GUYOT. *La perspective des finances nationales britanniques.* W. M. J. WILLIAMS. *Considérations nouvelles sur les pensions de guerre.* J. VELAY.

MAY. *La Russie, l'Allemagne et M. Lloyd George à la Conférence de Gênes.* YVES-GUYOT. *La diminution du coût de la vie.* X. X. *Chronique de l'inflation.* J. B. LEGROS. Referring to the Financial Commission of the Genoa Conference; and criticising the plan for the stabilisation of the European Exchanges proposed by Mr. Keynes in the Supplements on *Reconstruction in Europe,* published by the "Manchester Guardian."

Revue d'Économie Politique (Paris).

JANUARY–FEBRUARY, 1922. *La co-opération.* CHARLES GIDE. The first lecture of a course on the History and Doctrine of Co-operation by the occupant of a new Chair at the Collège de France founded by Co-operative Consumers' Societies. *L'introduction du franc en Alsace et en Lorraine,* I. W. WITTICH. *La Convention du 7 December,* 1921, *et le problème de l'union Latine va de Suisse.* G. PAILLARD. The writer, a professor at the University of Lausanne, considers the monetary situation from the Swiss point of view. *L'or du Transvaal.* L. BAUDIN. The causes of the recent decrease in the production of gold in the Transvaal are examined.

MARCH–APRIL. *La famine russe et ses causes.* S. ZAGORSKY. The present famine, far exceeding the partial and local dearths which used to recur regularly, is largely due to the diminution of the surface sown and other economic causes resulting from the Soviet policy. *Contributions aux théories du capital et du revenu.* CH. BODIN. *Prix-valeur.* PIERRE STRUVE. An extract from a Russian work on economy and prices; forming a sequel to articles which appeared in the May–June and July–August numbers of the "Révue." *L'essor des co-opératives de consommateurs en France depuis* 1913. B. LAVERGNE.

Revue de l'Institut de Sociologie (Brussels).

MARCH, 1922. *Les institutions des primitifs Australiens.* NADINE IVANITZKY. A posthumous work embodying the results of the best authorities. *Les prix solidaires.* M. ANSIAUX. Independent price is almost a fiction of the schools. The writer exemplifies correlated prices, substitutes, joint demand and joint production.

Jahrbücher für National Oekonomie und Statistik (Jena).

JANUARY, 1922. *Gustav Schmoller als Soziologe.* H. HERKNER. *Liefmann's rein-physiches System der Volkswirtschaft.* R. STELZMANN.

FEBRUARY. *Das Gerechtigkeits-problem in der Besteuerung.* E. H. VOGEL.

MARCH, 1922. *Der Geist des neuen Sozialdemokratischen Programmes.* P. KAMPFFMEYER. *Adam Mueller: Staats- und Gesellschaftslehre.* F. LENZ. *Flugverkehr und Wirtschaft,* II. MARTIN MÜLLER. The "rentability" of the flying business—the relation between the cost and the price of the service, and the rôle of the State, are considered. *Die Brotpreise und Kosten des Ernahrungsbedarfer in Berlin im Jahre* 1921. The immense rise in the price of cereal products in 1921 over 1920 (and of 1920 over 1919) is exhibited.

APRIL. *Die Agrarfrage im deutschen Sozialismus der Gegenwart.* DR. CHARLOTTE LEUBUSCHER. A general feature of the modern agrarian policy of German socialists is reversion from Marxian conceptions to the older pre-Marxian Socialism. *Lohn und Leistung.* W. WEDDINGEN.

Zeitschrift für Volkswirtschaft und Sozialpolitik (Vienna).

1922. Band I. 7–9 Heft. *Das Ziel der Wahrungspolitik.* DR. ALFRED AMONN. *Untersuchung zu dem Grundgesetz der wirtschaftlichen Wertsrechnung.* DR. HANS MEYER. *Die Arbeit in Sozialistischen Gemeinwesen.* DR. LUDWIG MISES. *Das Verhältnis von Ganzen und Teil in der Gesellschaftslehre.* DR. O. SPANN. *Produktionsumwege und Kapitalzins.*

10–12 Heft, *Prolegomena zu einer Theorie des ökonomischen Daten.* R. STRIGL. A foretaste of a forthcoming larger work. *Die sittliche verwahrlosung der weiblicher Jugend.* CARLA ZAGLITS. A treatise dealing with the causes and evils of prostitution, and the methods of restricting it. *Die statistischen Verhältniszahlen.* WILHELM WINKLER. A statistical study.

Giornale degli Economisti (Rome).

JANUARY, 1922. *Il Cotone.* G. MORTARA. From the *Prospettive Economiche* mentioned in the ECONOMIC JOURNAL, 1922, p. 146. *Del diritto o del delitto di sciopero nei pubblici Servizi.* G. MAJORANZA. On the right and wrong of strikes in the public service.

FEBRUARY, 1922. *L'economie italiana nel* 1921. LUIGI AMOROSO. A concise review of leading events, among which is prominent the closing of the Banca Italiana di Sconto. The general situation is described as very unstable. *Titoli Privati.* Referring to recent Italian legislation. *Il protezionismo marittimo in Italia,* V. EPICARMO CORBINO. The services subsidised before the war, the mercantile marine and naval industries during and since the war, are the subjects of the 5th and 6th section of this continued article.

MARCH, 1922. *I "beneficii" del produttore.* G. SENSINI. A study in profits, said to be zero in free competition and a maximum in pure monopoly. *Il protezionismo maritimo in Italia,* VI. EPICARMO CORBINO. *A proposito di demanda ed offerta del cotone.* M. BOLDRINI. Referring to H. L. Moore's article on Empirical Laws of Demand and Supply in the *Political Science Quarterly,* December 1919.

APRIL. *Sulle differenze ra dati Statistici.* G. MORTARA. Some useful formulæ relating to differences between two statistical quantities.

Revista Nacional de Economia (Madrid).

1921, Tom XI. *La nueva ley del Banco de España.* L. VICTOR PARET. In the management of the Bank there have been many mistakes which it is hoped that the new law will correct. *La politica Comercial de Italia y el Arancel de 1° de Julio de* 1921. GUISEPPE PRATO. A specimen of Italian Protection. *La classificación de los ingresos en la hacienda española.* J. M. FÁBREGAS DEL PILAR.

De Economist (La Hague).

FEBRUARY, 1922. *Robinson als rentetrekker* (II.). PROF. DR. H. W. C. BORDEWIJK. The dialectical inquiry whether Robinson Crusoe was a receiver of rent is concluded.

APRIL. *Het Taylorstelsel en de psychotechniek als grundlagen der menschen-economie.* A. E. VAN SAARLOOS. Scientific management and the psychophysics of labour are discussed. *De Indische financien.* H. VAN DER MANDERE. The finances of Dutch India is the subject.

Ekonomisk Tidskrift (Stockholm).

No. 12, 1921. Special number in honour of Professor Knut Wicksell.

Objectivity and Subjectivity in the Theory of Value. L. BORTKIEWICZ.

The Legal Eight-Hours Day: Some of its Economic Aspects. SVEN BRISMAN.

Marshall's Theory of Interest. EUGEN BÖHM BAWERK.

The Genesis of the Prevailing Depression. DAVID DAVIDSON.

The Effects of too low a Rate of Interest. ELI F. HECKSCHER.

Interlocking Directorates of Banks and other Joint Stock Enterprises in Sweden. OVVAR JOSEPHSSON.

Communal Taxation and the Taxpayer's Interest. ERIK LINDAHL.

The Theory of Interest. CARL MENGER.

On the Period of Renewal in Forestry. BERTIL OHLIN.

The Value of the Slumbering Millions. CURT ROTHLIEB.

Periodic Fluctuations in Foreign Exchange Rates. G. SILVERSTOLPE.

Interest: the Interpretation and Application of the Word as a Technical Term in Economics. EMIL SOMMARIN.

A Study in Swedish Price-History. KARL ÅMARK.

[The number includes contributions over the names of two economists of note who are no longer living. In the one case, a letter from Carl Menger to Böhm Bawerk, dated November 1884, relating to a point in the Theory of Interest seems to have little relation to the particular purpose of this special number, although dealing with a branch of Economic Theory to which Prof. Wicksell has devoted a good deal of attention. Böhm Bawerk's letter, addressed to Prof. Wicksell, is also of somewhat remote date, namely, July 1907, and sets out the writer's criticisms of Note XIII. in the Appendix to Marshall's *Principles*.

The opening article, by Prof. L. Bortkiewicz, discusses the relations of cost and demand to value, passing in review the opinions of various well-known writers.

In discussing the report of a Committee on the institution of a legal eight-hours day in Sweden, Dr. Brisman comes to the conclusion that it would result in reduced output and diminished national income, for which anticipated compensation through improved technical knowledge and organisation would not, in the circumstances of to-day, be realised.

Dr. Davidson challenges the view that the depression from which the

industrial world is suffering is traceable to a restrictive banking policy in the United States. He directs attention to the importance to the problem of the stocks of goods accumulated by the combatant powers, while other stocks, immobilised through the effects of the war, were also released after the return of peace. With illustrations from the case of copper, the action of producers in attempting to maintain the exchange value of their product is also discussed. Without denying some influence to banking policy, the course of events leading to the consumers' strike towards the end of 1920 is claimed as showing that other causes were more important.

Dr. Heckscher, in discussing the effects of a rate of loan interest lower than the rate which would equilibrate the economic forces in operation, proceeds from a somewhat forced hypothesis, which appears to affect the validity of some, at least, of his conclusions. He assumes as the first effect an expansion of the circulating medium, and then discusses the effects of confining this expansion so as to affect only the purchasers of capital goods. Deducing that a stimulus to the creation of capital goods would follow, he arrives at the result that an unduly low rate of interest operates to stimulate saving (real saving, that is to say, embodied in an increase of capital goods), yielding in this an effect similar to that of high rates of interest. Carrying with it no self-correcting consequence, too low a rate, according to this argument, gives results of a cumulative character.

Josephsson's discussion of the mutual interest arrangements between banking and business companies groups these in five classes, and furnishes a corresponding grouping of Swedish joint stock enterprises in 1903 and in 1918, incidentally showing the tendency to growth in the magnitude of the capital of these enterprises.

In the discussion of local taxation and its relation to the benefit principle, or rather to the tax-payer's interest in the local community and its government, Dr. Lindahl deals with conditions arising out of the particular local fiscal arrangements of his own country.

Dr. Ohlin's discussion of the maximum return in organised forestry, as dependent on the period of growth, which he illustrates diagrammatically, and some features of which are expressed in algebraic formulæ, suggests some important considerations from the practical standpoint, conclusions as to which must be tentative until adequate statistical material resulting from practical experience is available.

The "slumbering millions," whose valuation is the topic of Dr. Rothlieb's article, are the contributions of nature to the productive process, as distinguished from labour and capital. The economic doctrine of rent is, in fact, the topic of discussion.

Under the title of *Periodic Fluctuations in the Rates of Exchange*, Dr. Silverstolpe attempts to find guiding threads in the maze of foreign exchange variations, the study of which has been forced upon us by the range and violence of market movements in recent years. It is not clear that he has succeeded in discovering new guiding principles. That the course of events has directed increased attention to the importance of credit in modifying the relatively short-period movements of the exchanges is, however, clearly true.

Dr. Sommarin's subject is one the title of which fails to appeal to English readers, for it is not, in reality, the term "Interest" of which he discusses the economic use and significance, but a compound word, for which our language affords no corresponding single word. "Yield and Capital" not being a technical term with us, in the sense discussed, the historical development of the use of the term appeals mainly to natives of other lands.

By the use of records of valuations used in assessments for market purposes in a number of localities in Sweden, Dr. Åmark has compiled an index number of prices extending from 1732 to 1910. For years before 1822 the number of articles quoted is 23, thereafter 24. A diagrammatic comparison of English movements (Jevons and Sauerbeck) and Swedish shows a wide divergence in level before 1850 as compared with the later period, when movements were roughly similar in the two countries.

A. W. F.]

NEW BOOKS.

English.

Annual Register for 1921. Edited by M. Epstein. Longmans. 1922. Pp. 180.

[This is the hundred and sixty-third volume of the hardy annual which was founded by Edmund Burke in 1756. The old traditions are maintained under the Editorship of Dr. Epstein. There is a review of politics at home and abroad during the year 1921. Literature and law, finance and commerce are included in the comprehensive survey.]

BIRCK (PROF. L. V.). The Theory of Marginal Value. London: Routledge. Pp. 351.

BONAR (JAMES). Philosophy and Political Economy in some of their historical relations. (Third Edition.) London: Allen & Unwin. 1922. Pp. 424.

[Of the new features in the third edition the most remarkable is a supplement containing wise reflections on recent changes in economic policy.]

BOWRIE (JAMES A.). Sharing Profits with Employees. (Pitman's Industrial Administration Series.) London: Pitman. Pp. 222.

COPLAND (D. B.). Wheat Production in New Zealand: a Study in the Economics of New Zealand Agriculture. Auckland: Whitcombe. Pp. 311.

[The book is based on the results of investigations made by students of Canterbury University College proceeding to the M.A. degree in Economics.]

CARR-SAUNDERS (A. M.). The Population Problem: a study in human evolution. Oxford: Clarendon Press. Pp. 516.

DARLING (M. L.). Some Aspects of Co-operation in Germany, Italy and Ireland. Lahore: Government Printing. 1922. Pp. 19.

DILLON (DR. E. J.). Mexico on the Verge. London: Hutchinson. Pp. 328.

[The chapters on the oil interest and the connected subject of taxation claim the economist's attention.]

FENYÓ (MAX). Hungary of To-day. Budapest: Hungarian National Society of Agriculture (and other Bodies). Pp. 122.

[A description of the present economic conditions of Hungary prepared by several Hungarian Societies; one of which, the Fabricants, is managed by Max Fenyó, the author of a preface to the compilation.]

FISHER (LETTICE). Getting and Spending: an Introduction to Economics. With an Introduction by Sir William Ashley. London: Collins. Pp. 206.

GAMBLE (SIDNEY D.) and BURGESS (J. STEWART). Peking: a Social Survey. London: Milford. 1921. Pp. 538.

GILCHRIST (R. N.). Conciliation and Arbitration. No. 23 of Bulletins of Indian Industry and Labour. Calcutta: Government of India. 1922. Pp. 237.

GLOVER (WILLIAM). The Groundwork of Social Reconstruction. Cambridge: University Press. Pp. 106. 2*s*. 6*d*.

HOBSON (J. A.). Incentives in the New Industrial Order. London: Parsons. Pp. 160. 4*s.* 6*d.*

JOHNSON (T. B.). Unemployment and the Gold Standard. Weston-super-Mare: Lawrence. 1822. Pp. 40.

KOCH (FABIAN M. VON). On the Theories of Free Trade and Protection. London: King. 1922. Pp. 34. 1*s.*

[A well-reasoned and well-documented defence of Free Trade.]

LAVINGTON (F.). The Trade Cycle. An account of the causes producing rhythmical changes in the activity of business. London: King. 1922. Pp. 113.

LEWÍNSKI (JAN ST.). The Founders of Political Economy. London: King. 1922. Pp. 173.

MAHINDRA (K. C.). Indian Currency and Exchange. Madras: Ganesan. 1922. Pp. 252.

MORRIS (G. W.) and WOOD (L. S.). The Golden Fleece: an Introduction to the Industrial History of England. Oxford: Clarendon Press. 1922. Pp. 220.

PENSON (SIR HENRY). Is Germany Prosperous? Impressions Gained. January 1922. London: E. Arnold. Pp. 124. 3*s.* 6*d.*

PENZER (N. M.). The Mineral Resources of Burma. London: Routledge. 1922. Pp. 176.

RADFORD (ARTHUR). Industrial and Commercial Geography. London: Collins. Pp. 295.

REW (SIR HENRY). The Story of the Agricultural Club. London: King. 1922. Pp. 205.

Russia: the Restoration of Agriculture in the Famine Area. Translated from the Russian by Eden and Cedar Paul. London: Labour Publishing Co. 1922. Pp. 107.

[The interim report of the State Economic Planning Commission of the Council for Labour and Defence of the Russian Socialist Federal Soviet Republic. A collection of reports by several writers.]

SMITH (A. SHENE). Compound Interest. London: Wilson. Pp. 63.

SMITH (JOHN GEORGE). Organised Produce Markets. London: Longmans. 1922. Pp. 238.

[A description of trading methods in the principal produce markets of the world. Futures, and the uses and evils of speculation are specially considered.]

STAMP (SIR JOSIAH). Wealth and Taxable Capacity. (The Newmarch Lectures for 1920–21.) London: King. 10*s.* 6*d.*

VAKIL (C. N.). Our Fiscal Policy. Bombay University. 1922. Pp. 41.

WATTS (F.). An Introduction to the Psychological Problems of Industry. New York: Macmillan Co. 1921. Pp. 240. $5.

VERNON (H. M.). Industrial Fatigue and Efficiency. London: Routledge. 1921. 12*s.* 6*d.*

WILHELM (JOHN). Comprehensive Tables of Compound Interest. London: Wilson. 1922. Pp. 112.

American.

BALDWIN (DONALD C.). Capital Control in New York. (A thesis . . . for the degree of Doctor of Philosophy.) Menasha (Wis.): Banta. 1920. Pp. 255.

BASS (J. F.) and MOULTON (H. G.). America and the Balance Sheet of Europe. New York: Ronald Press. 1921. Pp. 361.

BOUCHE (O. FRED). The Development of Economics, 1750–1900. New York: Macmillan Co. 1921.

BRISSENDEN (PAUL F.). The I. W. W. A Study of American Syndicalism. (Second edition; Columbia University Studies.) New York: Columbia University. 1920. Pp. 438.

COAL. The Coal Miners' Insecurity. The irregular production of soft coal in the last nine years. New York: Russel Sage Foundation.

[Recent conditions render precarious the lives of over half a million miners and their families.]

DIETZ (F. C.). English Government Finance, 1485–1558. (University of Illinois Studies.) Urbana: University. 1920. Pp. 245.

DOUGLAS (PAUL and DOROTHY) and JOSLYN (CARL S.). What a man can afford. (Supplement to the *American Economic Review*, Vol. XI. No. 4.)

[Two essays to which the American Economic Association awarded prizes by Mr. Kavelsen for the best discussion of the question, What can one afford to give?]

FRIEDMAN (ELISHA M.). International Finance and its Reorganisation. New York: Dutton. 1922. Pp. 702.

HAYES (H. GORDON). Problems and Exercises to accompany Clay's *Economics for the General Reader* and Ely's *Outlines of Economics*. New York: Macmillan Co. 1922. Pp. 67.

KNIGHT (CHARLES KELLEY). The History of Life Insurance in the United States to 1870. With an Introduction to its development abroad. (A thesis for the degree of Doctor of Philosophy.) Philadelphia. 1920. Pp. 160.

LOWE (BOUTELLE ELLSWORTH). The International Protection of Labor. New York: Macmillan Co. 1921. Pp. xliii + 439. 12*s*. 6*d*.

[A useful reference book containing a detailed historical survey of the movement for the protection of labour by international agreements. There is one general chapter, entitled *Pro et Contra*, and a telling survey of the position and extent of labour legislation in the United States. More than half the book consists of texts, which include those of pre-war labour treaties, of "labor resolutions internationally subscribed," etc.]

MARSHALL (LEON CARROLL). Business Administration. Chicago: University Press. Pp. xxiv + 919.

OGAWA (GOTARO). Conscription System in Japan. New York: Oxford University Press. 1921. Pp. 245.

[The economic effects of the system are mainly bad; though some increase of efficiency, and of vitality tending to increase population may be admitted. The author is Professor of Finance in the University of Kioto.]

SELIGMAN (PROF. E. R. A.). Currency Inflation and Public Debts: an historical sketch. New York: Equitable Trust Company. 1921. Pp. 86.

[The history of the closely-connected phenomena public debt and currency inflation are traced down to the present time for several countries. The restoration of budgetary equilibrium requires international action, with limitation of armaments.]

STOCKTON (FRANK T.). The International Moulders Union of North America (Johns Hopkins University Studies.) Baltimore: Johns Hopkins Press. 1921. Pp. 222.

TAUSSIG (F. W.). Principles of Economics. Vol. I. Third edition, revised. New York: Macmillan Co. 1921. Pp. xxiii + 545.

[Several changes suggested by recent events—especially with respect to Money and Banking—distinguish the third edition.]

German.

BELOW (GEORG VON). Probleme der Wirtschaftsgeschichte. Tübingen. J. C. B. Mohr. 1920. Pp. xx + 710.

[A series of essays serving as an introduction to the study of Economic History and dealing *inter alia* with theories of Economic development, motives for Gild formation in Germany, the genesis of modern Capitalism, and the decay of mediæval towns.]

BENDIXEN (FRIEDRICH). Das Wesen des Geldes. Munich and Leipsic: Duncker & Humblot. 1922. Pp. 91.

CALMER (DR. ALBERT). Der Zollanschluss des Grossherzogtums Luxemburg an Deutschland (1842–1918). 2 vols. Frankfort, 1919. Pp. 268 and 252.

[An intensive study of a minor problem in European politics and economics, written with great care and thoroughness by a Professor at the University of Frankfort who was himself born in the Grand Duchy.]

GRADNAUER (GEORG) and SCHMIDT (ROBERT). Die deutsche Volkswirtschaft: Eine Einführung. Berlin. 1921. Pp. 231.

KERSCHAGL (RICHARD). Die Geldprobleme von Heute. Munich and Leipsic: Duncker & Humblot. 1922.

LEUBUSCHER (DR. CHARLOTTE). Sozialismus und Sozialisierung in England. Jena: Gustav Fischer. 1921. Pp. x + 229.

[A survey of recent Socialist and industrial developments in England.]

MOELLER (H). Die Sozialökonomische Kategorie des Wertes. Leipsic and Vienna: Deuticke. 1922. Pp. 100.

[An extract from the *Zeitschrift für Volkswirtschaft.*]

MOLL (DR. BRUNO). Logik des Geldes. Munich and Leipsic: Duncker & Humblot. 1922. Pp. 95.

PALYI (DR. MELCHIOR). Der Streit um der Staatliche Theorie des Geldes. Munich: Duncker & Humblot. 1922. Pp. 95.

PHILIPPOVICH (DR. EUGEN) and SOMARY (DR. FELIX). Grundriss der Politischen Oekonomie. Zweiter Band, Zweiter Teil. Tübingen: Mohr. 1921. Pp. 343.

[The tenth edition revised and in part rewritten—"Neu bearbeitete"—by Dr. Somary.]

PLANT (DR. TH.). Enstehen Wesen und bedeutung des Whitleyismus des Englischen Typs der Betriebsträte. Jena: Fischer. 1922. Pp. 241.

[The author is a privatdozent in the University of Hamburg.]

SCHMIDT (DR. ALFRED). Essen: Valutafibel. Eine Einführung in die Fragen des Geldwesens. Jena: Gustav Fischer. 1921. Pp. vii + 100.

[A popular account of the theory of money and of present-day monetary problems.]

French.

BADULESCO (DR. VICTOR). Le prélèvement extraordinaire sur le capital dans l'empire Allemand. Paris: Girard. 1922. Pp. 513.

LUZZATTI (LUIGI). La prix monétaire à la conference de Gênes. Rome. 1922.

PICARD (ROGER). Le contrôle ouvrier sur la gestion des enterprises. (Bibliothèque des Sciences Economiques). Paris: Rivière. 1922. Pp. 286.

Italian.

ARIAS (GINO). La questione Meridionale. Vol. II. Bologna. 1922.

BACHI (RICCARDO). L'Italia economica nel 1920. Annuario della vita commerciale, industriale agraria, bancaria, finanziaria e della politica economica. Città di Castello: Lapia.

[This, the twelfth, annual issue sustains the reputation of the series.]

CANTORIO (A.). Manuale de Economia Sociale. Vicenza. 1922.

MORTARA (G.). Lezioni di Statistica Metodologica. Città di Castello. 1922.

PANTALEONI (MAFFEO). Bolcevismo Italiano. Bari: Laterza. 1922. Pp. 276.

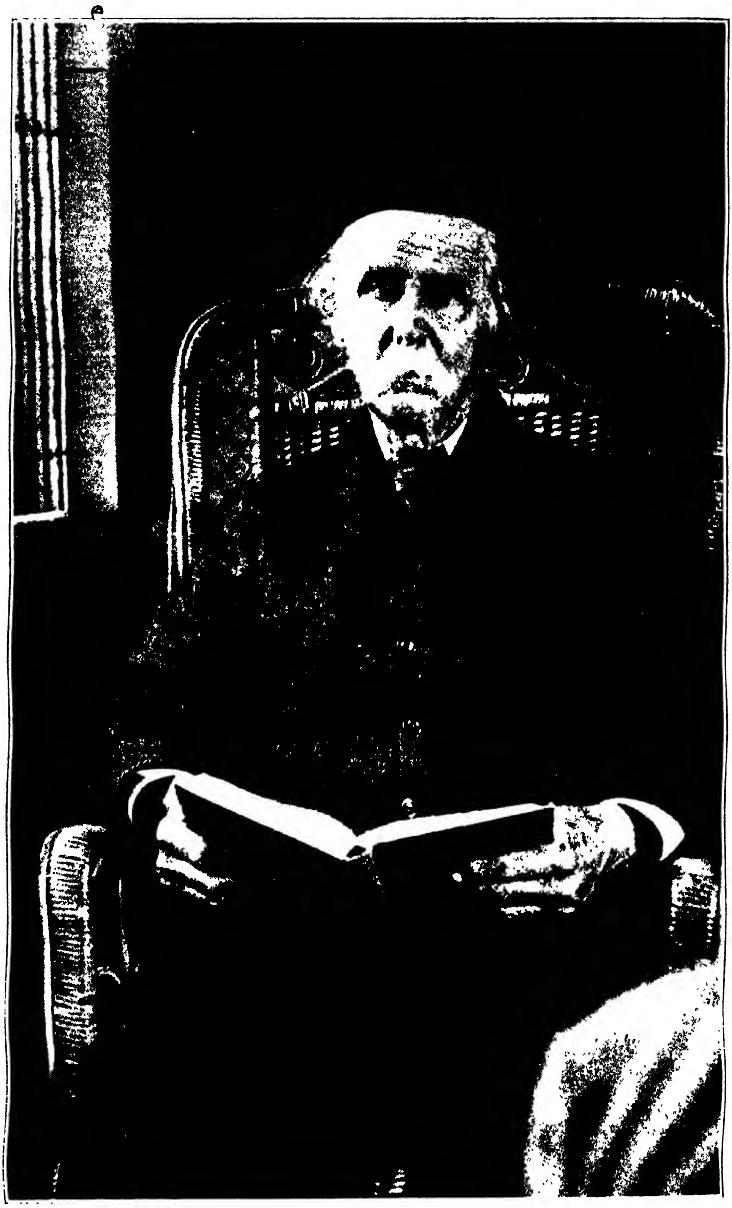
PANUNZIO. Diritto forza e violenza. Bologna. 1921.

PARETO (V.). Lezioni di scienza economica razionale e sperimentale. Rovigo: Industrie Grafiche. 1921. Pp. 104.

PREZIOSI (GIOVANNI). Co-operativo Rosso. Piovra dello Stato. Con introduzione di M. Pantaleoni. Bari: Laterza. 1922. Pp. 322.

SAVORGNAN (FRANCO). Demografia di guerra e altri saggi. Bologna: Zanichelli. 1921. Pp. 219.

[A collection of articles published since the outbreak of the war; mostly dealing with the relations between war and population—relations more complex than appears. *E. g.* the increase in " natimortalita " is, contrary to expectation, slight.]



ALFRED MARSHALL

THE ECONOMIC JOURNAL

SEPTEMBER, 1922

DR. MARSHALL'S EIGHTIETH BIRTHDAY

On the occasion of Dr. Alfred Marshall's eightieth birthday (July 26, 1922), the following Address was presented to him by members of the Royal Economic Society:—

On the occasion of your eightieth birthday we—many of us formerly your pupils, all of us admiring students of your writings—make bold to send you a brief message of congratulation. You have held up through a long life, with single aim and steady purpose, a high scientific ideal; to look through the sign to the thing signified, to shun the superficial and the plausible, and never to be content with the good when the better may still be attained. You have given inspiration to youth and counsel and enlightenment to age. The School of Economics at Cambridge is your child; on the Labour Commission and in your evidence before the Gold and Silver and other Commissions you have rendered important direct service to the State and have advanced Economic Science. But it is as a master of method and a path-breaker in difficult regions that we, the signatories of this letter, desire especially to greet you. Through you, British economists may boast among their foreign colleagues that they have a leader in the great tradition of Adam Smith and Ricardo and Mill, and of like stature. In gratitude and affectionate esteem we wish you continuing power and happy days and the sense of work well done.

Haldane of Cloan, President of the Royal Economic Society.
Balfour, Vice-President of the Royal Economic Society.

A. Andréadès	Professor in the University of Athens.
William Ashley, Kt.	„ „ „ Birmingham.
C. F. Bastable	„ „ „ Dublin.
Stephan Bauer	„ „ „ Basle.
W. H. Beveridge, K.C.B.	Director of the London School of Economics.
[Ar]thur L. Bowley, Sc.D.	Professor in the University of London.
[L. B]rentano	„ „ „ Munich.

Edwin Cannan .	Professor in the University of London.
T. N. Carver, Ph.D.	Professor in Harvard University.
Gustav Cassel .	Professor in the University of Stockholm.
S. J. Chapman, K.C.B.	Formerly Professor in the University of Manchester.
J. H. Clapham, Litt.D., C.B.E	Formerly Professor in the University of Leeds.
F. Y. Edgeworth . .	Professor Emeritus in the University of Oxford.
Irving Fisher . . .	Professor in the University of Yale.
A. W. Flux, C.B. . .	Formerly Professor in the University of Montreal.
Charles Gide . . .	Professor in the University of Paris.
A. T. Hadley . . .	Formerly President of Yale.
H. M. Hallsworth . .	Professor in the University of Newcastle.
H. Stanley Jevons . .	,, ,, ,, Allahabad.
A. W. Kirkaldy . .	,, ,, ,, Nottingham.
Douglas Knoop . .	,, ,, ,, Sheffield.
R. A. Lehfeldt . .	,, ,, ,, Johannesburg
D. H. Macgregor . .	,, ,, ,, Oxford.
E. Mahaim . . .	,, ,, ,, Liége.
H. O. Meredith . .	,, ,, ,, Belfast.
J. S. Nicholson . .	,, ,, ,, Edinburgh.
C. H. Oldham . . .	,, ,, ,, Dublin.
A. C. Pigou . . .	,, ,, ,, Cambridge.
J. A. Schumpeter . .	,, ,, ,, Vienna.
W. R. Scott, Litt.D., LL.D.	,, ,, ,, Glasgow.
Edwin R. A. Seligman, Ph.D.	,, in Columbia University, New York.
T. A. Smiddy . . .	,, in the University of Cork.
W. R. Sorley, Litt.D. .	,, ,, ,, Cambridge.
F. W. Taussig . . .	,, in Harvard University.

R. Mary Abbot.
W. M. Acworth, K.C.S.I., Kt.
C. S. Addis, K.C.M.G.
Leonard Alston.
G. Armitage-Smith, Litt.D.
Percy Ashley, C.B.
D. Barbour, K.C.M.G., K.C.S.I.
A. E. Bateman, K.C.M.G.
Hugh Bell, Bart.
James Bonar, LL.D.
R. H. Brand, C.M.G.
Leslie D. Clark.
Clara E. Collet, M.A.
Leonard Darwin.
William H. Dawson.
Thomas H. Elliott, Bart, K.C.B.
M. Epstein, Ph.D.
Oswald T. Falk, C.B.E.
C. R. Fay.
H. Fountain, C.B.
H. Sanderson Furniss.
George S. Gibb, Kt.
Lynda Grier, Principal of Lady Margaret Hall, Oxford.
C. W. Guillebaud.
F. C. Harrison, C.S.I.
R. G. Hawtrey.
H. D. Henderson.
Henry Higgs, C.B.
Alfred Hoare.
C. K. Hobson.
B. L. Hutchins.
J. M. Keynes, C.B.
J. N. Keynes, Sc.D.
F. Lavington.
H. B. Lees-Smith.
E. Lipson.
H. Llewellyn-Smith, G.C.B.
Henry W. Macrosty.
Theodore Morison, K.C.I.E.
Marian F. Pease.
J. Henry Penson, K.B.E.
F. W. Pethick Lawrence
L. R. Phelps, Provost of Oriel.
L. L. Price.
Hélène Reynard.
D. H. Robertson.
Charles P. Sanger.
G. F. Shove.
J. C. Stamp, Sc.D., K.B.E.
Mary Stocks, B.Sc.
R. H. Tawney.
Barbara Wootton.
G. Udny Yule, C.B.E.

Dr. Marshall replied to the Secretary of the Society as follows:—

Sea Vale,
East Lulworth,
Dorset,
July 27, 1922.

MY DEAR KEYNES,

The address, which you have sent to me on my eightieth birthday, fills me with gratitude and joy. It is all too kind: but I am so avaricious that I would not give up a jot of it.

It is true of almost every science that, the longer one studies it, the larger its scope seems to be: though in fact its scope may have remained almost unchanged. But the subject matter of economics grows apace; so that the coming generation will have a much larger field to study, as well as more exacting notions as to the way in which it needs to be studied, than fell to the lot of their predecessors. The Chinese worship their ancestors: an old student of economics may look with reverential awe on the work, which he sees young students preparing themselves to do.

If I have helped in putting some young students on the way to grapple with the economic problems of the coming age, that is far more important than anything which I have been able to do myself: and, resting on the hope that I have done a little in this direction, I can depart in peace.

Yours happily,
ALFRED MARSHALL.

THE GENOA RESOLUTIONS ON CURRENCY

The Financial Commission of the Genoa Conference passed a series of twelve Resolutions (Cmd. 1667, pp. 60–2) on the subject of currency, which were adopted by the full Conference, and which may therefore be regarded as the united voice of the Governments of Europe.

That there should really be twelve propositions on the subject of currency, which command the agreement of all Europe, would seem to be a fantasy hardly deserving serious consideration. That there should even be the appearance of agreement invites the suspicion that the resolutions must be strictly confined to pious platitudes, and surely the stock of pious platitudes respecting currency must long ago have been exhausted, if not at the Brussels Conference of 1920, at any rate at the multitudinous conferences and discussions which have taken place since the end of the war.

By most critics the Genoa resolutions are dismissed with some such remarks as these. And there is no difficulty in supporting their criticisms with quotations from the resolutions themselves. That stability is desirable, that central banks should be independent of political pressure, that all European currencies should be based on a common standard, that the only possible common standard is gold, that, so long as budget deficits are met by the creation of paper money, currency reform is impossible, these are propositions of the familiar type.

But to suppose that all the resolutions conform to this model is to do them something less than justice, and in the following pages I shall endeavour to show what is their practical bearing, and what results we may hope for from them.

The first practical step recommended in the resolutions is the meeting of representatives of central banks (Res. 3), to be summoned by the Bank of England (Res. 12), to which representatives of the United States are to be invited (Res. 10). The primary object of this meeting is to develop "the practice of continuous co-operation among central banks of issue, or banks regulating credit policy in the several countries" (Res. 3), but there is specifically referred to it a scheme for an international

convention, based on a gold exchange standard, and designed "with a view to preventing undue fluctuations in the purchasing power of gold" (Res. 11).

Another international conference! What, will the line stretch out to the crack of doom?

But here there is a difference. The calling in of the central banks is a recognition of the principle that currency policy is ultimately credit policy, for the direction of credit policy is the special function of a central bank.

It is true that the currency inflation during the war, and the most flagrant examples of currency inflation since, have been due to the action, not of central banks, but of governments. If the central banks contributed, that was only because they were allowed no choice but to create credit for their governments.

It is everywhere recognised that government action of this kind must cease if anything whatever is to be done with the currency, and some of the pious platitudes adopted at Genoa (Resns. 2, 7, & 11 (1) (*a*)) were needed to place this presupposition on record once again.

If the Conference added nothing to what had already been said on this topic, that was because there was nothing to add. The particular measures required for balancing budgets and avoiding inflationary finance are not, properly speaking, currency measures at all, though they are very intimately affected by the state of the currency. Moreover, except in one important but limited class of cases, they provide no field for international action. They are the domestic business of each country, and are not the concern of an international conference. With regard to the exception, the inter-government obligations left behind by the great war, we shall have a word to say later on.

Inflationary government finance once eliminated, the real responsibility for the currency passes from the government to the central bank. The central bank may be itself a government department, or essentially subordinate to the government, but, even if it is, it has the responsibility for regulating the currency *on banking principles*. When, therefore, the governments of Europe pass on their monetary programme to the central banks, it is the same sort of step forward as is taken by allies in war, when the political leaders hand over the task of concerting operations to the military commanders. Broad guidance must be given by the political leaders, but it is only the military commanders who can plan and take practical action.

When the supply of paper money through advances to the

government for budget expenses is cut off, the banking and trading community can only get fresh supplies of currency from the central bank through the instrumentality of trade borrowing, such as discounts and advances. The only means of regulating the supply of currency is then by encouraging or discouraging trade borrowing. Legislative or administrative regulations, limiting or prescribing the issue of legal tender money, may play an important part, but, in the last resort, only by affecting the action of the central bank. Anyone who can borrow from the central bank can thereby procure legal tender money, and in such borrowing operations (which in most countries take the form of re-discounting) is concentrated the whole demand for currency. If the issues of currency are to be limited, whether by statute or otherwise, practical effect can only be given to the limitation through a control of re-discounts.

In the scheme which is referred to the meeting of central banks is embodied the plan of campaign adopted by the governments at Genoa. It starts (Res. 11, par. 1) with the necessary governmental and legislative action, viz. (*a*) the elimination of inflationary methods from the budget, and (*b*) the determination of the gold value of the monetary unit. The next step, (*c*) "the gold value so fixed must then be made effective in a free exchange market," is one involving credit regulation, and therefore demands co-operation by the central bank. For the determination of the gold value of the monetary unit fixes implicitly a standard for its purchasing power in terms of goods and services. If the standard diverges from actual market conditions, then the purchasing power of the unit must be modified. Convertibility into gold or foreign exchange is not practicable until the unit is at or very near the parity determined upon, and thus in the first instance the value of the unit must be adjusted through the central bank's credit policy. If the prescribed value is above the existing market value of the unit, credit must be contracted; if below, credit must be relaxed.

Now changes, through credit regulation, in the purchasing power of the unit are not to be made at will and without limit. An undue expansion or contraction of credit, involving a general rise or fall in price, has detrimental and even disastrous results upon the economic life of the community. Therefore when the legislation is introduced for the second stage, (*b*) the determination of the gold value of the unit, the central bank, by whose action alone effect can be given to the decision, must be consulted and must participate.

The fourth step is, (*d*) " the provision of an adequate reserve of approved assets, not necessarily gold." The reserve will, of course, be the property of the central bank, which is responsible for using it to maintain the convertibility of the currency. That will not prevent the government from assisting in various ways, but the principal in the business will be the bank and not the government.

In fact every stage in the process of returning to the gold standard, except the pre-requisite balancing of the national budget, requires at least the co-operation of the central bank.

Pars. 2–7 of Res. 11 deal with the subsequent working of the convention, when the gold standard is actually operative. It may be asked, why is any international agreement on the subject of the gold standard necessary at all? When we have once got a currency based on a commodity like gold, why should we not rely on free market conditions, as we did before the war?

To ask such questions is to disregard the profound changes which have occurred since 1914. The substitution of paper for gold as the circulating medium in so many countries has displaced an enormous amount of gold from circulation. This gold has mostly gone to swell the stock in the United States, being the only country left with a real gold standard. The result has been a great fall in the commodity value of gold. Even now the commodity value of the gold dollar, after being raised 80 per cent. in twelve months by the most severe deflation ever effected, is only two-thirds of what it was before the war. If currency reform means simply a reversion to pre-war conditions, there is an obvious risk that the value of gold may be raised again by " the simultaneous and competitive efforts of countries to secure metallic reserves " (Res. 9). This is not a visionary or theoretical danger. Several examples are to be found in history of the derangement of monetary conditions through an ill-regulated competition for the precious metals. The most notorious is the chronic state of depression which prevailed during the spread of the gold standard in the period 1873–1896. A less well known but still instructive instance is to be found in the breakdown of the return to specie payments in England, Austria-Hungary and Russia in the period 1816–18, through the depletion of the French reserves of gold and silver and the consequent credit stringency in Paris.

If an undue demand for gold is to be avoided, we must have some method of economising the use of gold as currency. This we find ready to hand in the gold exchange standard, the

application of which forms the subject of pars. 2–5 of Res. 11. The principle is that the currency of each participating country, instead of being convertible into gold, may be convertible at par into the currencies of the others. To secure convertibility, the participating countries will hold reserves of "approved assets" (bank balances, bills, short term securities or other suitable liquid resources) in one another's currencies, and will undertake to buy and sell such assets freely for their own currencies.

Different currencies linked by an exchange standard so planned could be maintained permanently at par with one another without the intervention of any metallic medium at all. If the system is to be based on a gold standard, then, at some point or other, one at least of the currencies must be convertible not merely into other currencies but *into gold*. Accordingly "certain of the participating countries will establish a free market in gold, and thus become gold centres" (par. 2).

At the gold centres some gold reserves must be maintained. But if the convention is practically world-wide, if all the gold-standard countries adhere to it, gold will nowhere be needed as a means of remittance, and gold will only be withdrawn from the reserves for use as a raw material of industry.

The precise extent of the industrial demand is not accurately known, but it can hardly amount to £50,000,000 a year. At any rate, even with the fall since 1914 in the value of gold in comparison with other commodities, it is unlikely that the industrial consumption of gold has so far increased as to approach the annual output, which is now about £70,000,000.

The aggregate gold reserves held for monetary purposes exceed £1,500,000,000. Here we have a "visible supply" of a commodity equal to something like thirty years' consumption. In face of the existence of such a stock, the gold market cannot but be entirely artificial. A release from stock of a quantity of gold, quite moderate in proportion to the total, might completely swamp the market. In fact the gold exchange standard is *too* effective in economising gold. If it were pushed to its logical limits, far the greater part of the existing gold reserves would become redundant, and the commodity value of gold, upon which the value of every currency unit depends, might be depressed below even the low value which it reached in 1920 (when the purchasing power of the gold dollar fell to three-eighths of what it had been in 1914).

It is therefore apparent that in tying our currency units to gold, we are not securing a natural or stable standard of value at

all. To complete the system, we must provide for the proper regulation of the almost unlimited power which the currency authorities will have over the value of gold itself.

Accordingly "credit will be regulated, not only with a view to maintaining the currencies at par with one another, but also with a view to preventing undue fluctuations in the purchasing power of gold" (Res. 11 (7)).

Critics of the Genoa resolutions have for the most part either overlooked this recommendation altogether, or they have viewed it with misgiving and suspicion as an academic proposal of doubtful practicability. What has already been said above shows how essential the stabilisation of gold is to the whole scheme. But it will be worth while to examine it in some detail, in order both to remove misconceptions and to reveal the implications of the proposal.

In the first place, what of its practicability? Can the value of gold be regulated, and, if so, how? With a gold standard, the *price* of gold in currency is fixed, and everyone knows how gold reserves can be used to prevent the price varying. What we are here concerned with is the value of gold, and therefore of the currency unit *in terms of other commodities*.

In other words we want to stabilise prices. Needless to say, it is not suggested that anything should be done to control the prices of particular commodities. The proposal is to eliminate causes tending to raise or lower *all* prices. Such causes proceed from the state of the currency. According to the quantity theory, an increase or decrease in the quantity of means of payment (including both legal tender money and bank credits subject to cheque) tends to bring about a proportional increase or decrease in prices. The supply of legal tender money depends directly on the central bank. The supply of bank credits depends upon trade borrowing, and so upon the lending policy of the other banks.

But the lending policy of the banks depends upon the lending policy of the central bank. When they lend, they assume liabilities which are payable on demand in legal tender money, and they must assure themselves of adequate cash reserves to provide for these liabilities. Therefore their willingness to lend depends upon the facilities for obtaining legal tender money, and these facilities depend in turn upon the willingness of the central bank to lend. The willingness of the central bank to lend is measured by its "bank rate," or "re-discount rate." A variation in the rate directly affects only the other banks. But in practice

they in turn usually put the rates they charge to borrowers up or down with it. Thus trade borrowing as a whole is discouraged or encouraged, and the supply of the means of payment restricted or stimulated.

This is not the place to dwell upon the mechanism of the control of credit in detail. But there is one complication so important that it must be mentioned. With a given volume of business, prices depend not only upon the quantity of the means of payment, but upon its *rapidity of circulation*. Rapidity of circulation is not a very satisfactory expression, and it is not necessary to enter upon a criticism of it. What we are really concerned with is anything which tends to *increase or decrease* rapidity of circulation. And the practical form which such a tendency takes is a decreased or increased willingness on the part of the public, and especially of traders, to hold balances of money (in cash or credit). Above all, an expectation that prices will rise makes people less willing to hold such balances, and an expectation that they will fall makes them more willing. When, therefore, the central bank, by re-discounting at low rates, has once succeeded in stimulating trade borrowing, and the increase in the supply of the means of payment has started a rise in prices, the consequent increase in rapidity of circulation immediately tends to exaggerate the tendency. And *vice versa*, when high re-discount rates have checked trade borrowing, the consequent decline in rapidity of circulation exaggerates the fall of prices.

The quantity theory, enunciated, as it sometimes is, without any reference to variations in rapidity of circulation or any reservation covering such variations, is fallacious. But the principle of the regulation of the currency unit through the control of credit is not dependent on this crude form of the theory. For the changes in rapidity of circulation arising from the control of credit *reinforce* its effects. Provided the action of the central bank is effective in accelerating or retarding trade borrowing, the resulting rise or fall of prices is greater, not less, than in proportion to the change in the quantity of means of payment. Money is not borrowed to be kept lying idle. It is paid away, as soon as borrowed, either directly, or through the medium of dealers, for the expenses of production. It is almost literally true to say that a net addition to the amount of trade borrowing in any period of time is an addition to the money income of the community for that period. The changes in the quantity of the means of payment are subsequent and consequent.

Now it is money income, not the quantity of the means of payment, that affects demand. Or rather it is money income that determines expenditure, expenditure that determines demand, demand that determines prices. Therefore the problem of regulating prices is reduced to the problem of regulating trade borrowing.

Even the power of the central bank to regulate trade borrowing is sometimes contested. Interest on bank advances or discount on bills forms an almost negligible item in the total cost of production. Can it be supposed that an increase of two or three per cent. ($\frac{1}{2}$ to $\frac{3}{4}$ per cent. for three months) will seriously affect the willingness of producers to borrow? And even if it be admitted that experience proved the sensitiveness of business to bank rate under pre-war conditions, was not this sensitiveness largely psychological? Did not traders take the advance in bank rate as a sign of the anxiety of the central bank, and its fears of an approaching exhaustion of its reserves?

Before the war the credit policy of central banks was always based (as it still ostensibly is) upon the amount or proportion of gold reserves. A shortage or threatened shortage of gold reserves might be interpreted as endangering credit. The rise in the bank rate might be a danger signal, leading all lenders to fear default on the part of borrowers and to restrict operations.

But when paper money is used, a general default of borrowers on account of a shortage of cash becomes impossible. Whatever legal limitations may be imposed on the note issue cannot be maintained when the pinch comes. They could only be maintained through a refusal by the central bank to lend after they have been reached. It is well understood that such a refusal would be fatal, and in practice it is never resorted to. (A general refusal to lend was, it is true, a characteristic of pre-war American crises, but that was in a banking system with no central bank and no discount market.)

Nor is it in the least necessary to drag in a general fear of default from shortage of cash as the explanation of the sensitiveness of business to the bank rate or re-discount rate. It is perfectly true that the producer is not much troubled by the rate of interest he has to pay his banker. But that is not so in the case of the merchant or dealer, who is constantly carrying stocks of goods large in proportion to his own capital, and makes very nice calculations as to his margin of profit and the cost of borrowing. A moderate rise in the cost of borrowing will make the carrying of stocks appreciably less attractive to him. He will buy less and sell more, and so a fall of prices can be started.

General price variations are closely identified with the trade cycle, interest in which has lately been revived by the great trade fluctuation of the past three years. Active trade is accompanied by rising prices, that is to say, by a depreciating currency unit, and depressed trade by falling prices, or an appreciating unit. Which is cause, and which is effect? Various attempts have been made to show that the trade cycle is explicable by some deep-seated non-monetary cause, and that the price variations are merely symptomatic.

There are two principal theories.

One traces the trade cycle to periodical over-production, the other to periodical states of over-confidence.

According to the former, if at any time trade is active, people are tempted to invest too much money in extending the means of production. The process of investment takes time, and, as it progresses, output is gradually swollen, till it outstrips demand. Excess supply then depresses prices and discourages investment, till supply falls off, prices recover and the cycle begins again.

According to the other theory, the root cause of the trade cycle is a long-period change in the state of business confidence. A rise or fall in confidence is contagious, and, once started, markets cannot free themselves from it till it runs up against some physical obstacle in the state of production.

The two theories are not mutually exclusive, and are usually combined, the over-investment being attributed to the over-confidence. Nor are monetary causes altogether ruled out. It is admitted that the over-confidence leads to too much trade borrowing, and so to an inflation of the means of payment.

If these theories of the trade cycle are correct, is it not vain to hope that prices can be steadied? Is it not impossible for a central bank to alter the conditions of production or of supply and demand, or to correct the weakness of mob psychology?

I believe not. And I shall not stop to argue (what I believe to be true) that the trade cycle is a *purely* monetary phenomenon. Let the non-monetary theories be admitted. What then can be done by means of the control of credit?

Assume a state of over-confidence. "Confidence" here means an expectation that prices will rise, that and nothing else. To be pedantically correct, it is better to say that it means an expectation that effective demand at a given price will grow. "General business confidence" means an expectation that the effective demand for *all* commodities will grow. This expectation makes trade borrowing for the purchase of commodities attractive,

and if unchecked the increase in trade borrowing will itself bring about the anticipated rise of prices. But, then, if only the cost of trade borrowing be raised high enough, its attractiveness can be counteracted. If the over-confidence does not lead to increased trade borrowing, the expectation of increased demand will be disappointed, and prices will not rise. How long the over-confidence will survive its disappointment is another matter. So long as it does survive, borrowing must be kept in check. But whether the continuance of the treatment be long or short, it will prevent a rise of prices, that is to say, a depreciation of the currency unit. In reality, of course, the over-confidence would not outlast its disappointment long. Bank rate *might* theoretically have to be raised very high to have this effect, but experience teaches that borrowing reacts to a very moderate rise.

The other branch of the problem, the counteracting of a loss of confidence, is not quite so certainly soluble. "Loss of confidence" means an expectation that prices will fall, or that demand will contract. It is theoretically conceivable in such a case that no rate of interest, however low, would tempt dealers to buy goods. Even lending money without interest would not help, if the borrower anticipated a loss on every conceivable use that he could make of the money. Business got into something very like this state in England after the American crisis of 1893. Bank rate was kept at 2 per cent. for upwards of two years before a revival began, and the open market rate for three-months bills fell below 1 per cent.

But such a condition of stagnation is not possible except in the course of reaction from a riot of inflation. If the inflation is prevented, the stagnation will never arise.

But even granted that variations in business confidence can be counteracted, how can we deal with periodical over-production? According to this theory the over-production is the result of past over-investment, which in turn is brought about by an expectation of high profits at a time of short supply. The expectation of high profits can be kept within bounds by a high rate of interest just as easily when it is due to a real shortage of stocks of commodities as when it is merely a vagary of mob psychology. What is required is to counteract, or, at any rate, to check the general desire of merchants to restore their stocks to normal. In 1919, when stocks had been nearly everywhere depleted by war conditions, a high rate on trade borrowing would have done much to guard against the danger of inflation, at all events in those

countries where government finance was not in extreme disorder.

This state of things was abnormal. It is by no means true that under pre-war conditions a revival of trade synchronised with a shortage of stocks or a falling off with a glut. But it is not necessary to argue that point; it is enough to say that, if the shortage or the glut did occur, its effects upon prices, and therefore upon profits, and therefore upon investment, could be counteracted through the instrumentality of the control of credit.

In short, whatever other factors affect the purchasing power of the monetary unit, one, the volume of trade borrowing, is amenable to human control. By its means the agency which exercises the control, that is to say, the central bank, can correct the effects of all the others.

That does not completely dispose of all doubts as to the practicability of stabilisation. It would be vain to ignore the many difficulties in the way of the detailed application of the policy. How is the purchasing power of the unit to be measured? Any available index number is bound to be affected by price variations in particular commodities arising from non-monetary causes, such as harvest conditions, new inventions, discovery or development of new sources of supply or exhaustion of those that exist. A blind adherence to the index may hide a real departure from the path of stabilisation. And, what is almost more fundamental, a change in the monetary supply may manifest itself at first not in a change of prices at all, but in a change in the volume of purchases; it may have made material progress before the index number is affected. Stabilisation cannot be secured by any hard-and-fast rules. The central banks must exercise discretion; they must be ready to detect and forestall any monetary disturbance even before it has affected prices. The policy can only be perfected by long experience. Nor can it be assumed that perfect stabilisation of internal purchasing power is always reconcilable with perfect stabilisation of the foreign exchanges. The maintenance of the exchanges within a small fraction of parity, which is of the essence of the scheme, may involve a small departure of the internal purchasing power of the unit from the norm in one or more countries. A suitable compromise must be arrived at by the central banks among themselves, but it is no use to under-estimate the difficulty of preserving an even course under such conditions.

Finally, it may be asked what real benefit a policy of direct

stabilisation of the unit, even if practicable, will confer upon us. It may be freely granted that any *large* fluctuations in the commodity value of the unit, such as occur in countries with "collapsed" currencies, are a deadly evil. But is there any harm in the limited fluctuations that occurred under a gold standard before the war? The maladjustment of gold reserves, referred to above, must of course be corrected. But once the gold supply is suitably distributed, why should we not get on as we did before the war, and leave index numbers of prices to amuse the theorists?

The assumption that the maladjustment of gold reserves will have been corrected is rather a large one. But there is no need to press that point. For before the war the world *did* suffer gravely from the fluctuations in the commodity value of money, moderate as those fluctuations seemed to be. It has been pointed out above that the fluctuations of the currency unit are intimately related to the trade cycle. Now the problem of unemployment, as we knew it before the war, was nothing more nor less than the problem of the trade cycle. Unemployment there might be in particular industries independently of the trade cycle. But *general* unemployment such as prevailed in 1908–9, in 1903–5, in 1892–5, in 1884–7, in 1877–9, and in many earlier periods, was invariably a symptom of the adverse phase of the trade cycle.

So long as credit is regulated with reference to reserve proportions, the trade cycle is bound to recur. The flow of legal tender money into circulation and back is one of the very tardiest consequences of a credit expansion or contraction. If the central bank waits for this flow to affect its reserves, and sits passively looking on at an expansion or contraction gathering impetus for years before it takes any decisive action, we cannot escape from the alternations of feverish activity with depression and unemployment. If the central bank watches, not the reserve proportion, but the aberrations of the flow of purchasing power (as measured by prices, subject to the necessary allowances) from a perfectly even course, early action will become the rule, the expansion will be checked in time and the contraction will be avoided. Expansion and reaction have been more pronounced and more injurious in the short period that has elapsed since the war than ever before. That is because the credit situation has been allowed to drift without much regard even to the old test of reserve proportions.

To attribute our present unemployment to credit contraction may seem to run counter to the prevalent opinion, which finds

the cause in the collapse of Central and Eastern European currencies. But if Continental customers cannot buy British goods, that is largely on account of that very pressure to sell, which has been brought about by the credit contraction. This pressure to sell has not only reacted adversely upon production here, but has raised the value of sterling both in commodities and in foreign currencies, and has congested markets with accumulated stocks all over the world. These consequences are not more conspicuous in European markets than elsewhere, for example in South America and the East. Nor have we really suffered materially from the low cost of production in the countries with collapsed currencies, for by the test of the volume of exports their competition is much less formidable than before the war.

It is quite superfluous to seek for other causes of depression and unemployment, when there has been so tremendous a deflation as to reduce prices by half in less than two years. The relation of business depression to falling prices is so well recognised, not merely among economists but among practical men, that it is hardly necessary to labour the point. Experience has confirmed theory scores of times.

That does not mean to say that we do not suffer through the distresses of Europe. Our loss is heavy enough, but it does not take the form of unemployment. Unemployment is due to a defect of organisation, a maladjustment of the monetary machinery. The defect can be cured, the maladjustment can be corrected.

This is all very well, it may be said, for the countries which already have healthy currencies. By taking thought, they can perhaps do even better than before the war. But that is not the urgent problem for which the Genoa Conference was called together. What help do the resolutions offer to the countries with collapsed currencies themselves? It may be quite true that their disorders are not the cause of our depression, but that does not mean that the disorders themselves are unimportant.

These disorders are due, one and all, to budget deficits. This is true without qualification. The budget deficits themselves are due to many causes. It may possibly be true in one case that no financial expedients can provide adequate resources for the expenses of government. If so, the budget deficit is there a symptom of a more deep-seated economic malady, a real inability to attain the subsistence level. But that, at any rate, is exceptional. Elsewhere budget deficits have less fundamental causes.

We need not examine them in detail, but we may refer in particular to the case of international indebtedness.

To international indebtedness, whether reparations or war debts, have been attributed all the currency and exchange disturbances of Europe. Those who take this view have overlooked the fact that, apart from German reparations, practically none of the debts have even begun to be paid. Even the sums paid by Germany have been moderate in comparison with the capacity of the exchange market. The real difficulty is that the debtor countries have failed to *budget* for their liabilities. The reparation payments made by Germany up to now have been effected not by raising the money from the tax-payer to buy the necessary exchange, but by creating inflated credits. So long as this is so, the reparation difficulty is merely the budget difficulty over again.

Undoubtedly it might be that a country, which could successfully budget for the equivalent in its own currency of its foreign obligations, would fail to create the necessary export surplus, and in that event the exchange market would break down. That situation would have to be dealt with if it arose, but it has not yet arisen.

In one respect the Genoa resolutions are really unsatisfactory. It is impossible to point to any particular time at which effect can be given to them. Not only must they wait for the balancing of budgets before they can take effect in the weaker countries; even in the stronger they must wait for the establishment of a gold parity, whether the restoration of the old one or the adoption of a new. England and half a dozen other countries are within less than ten per cent. of par. But no one can say for certain how long it will take to bridge the gap. Further deflation is out of the question, and all we can do is to stabilise our currency at its existing purchasing power till the redundant supplies of gold now in America have brought down the commodity value of the dollar to the corresponding level.

Some countries, whose currencies are at less than half their pre-war gold parities, are nevertheless extremely unwilling to give up the prospect of restoring them. France, Belgium and Italy all took this attitude at Genoa. It seems to involve an almost indefinite postponement of stabilisation so far as they are concerned.

On the other hand, countries with collapsed currencies, as soon as they have surmounted their budget difficulties, and are in a position to stabilise, will have no compunction about adopting

a new parity. For them the stabilisation of the healthy currencies is by no means a matter of indifference. One of the great practical difficulties in the way of currency reform in countries like Finland or Czecho-Slovakia, which have gained effective control of their credit situation, has been the rise in the commodity value of the dollar and the pound during the past two years.

R. G. HAWTREY

OF EMPTY ECONOMIC BOXES

Picture an economist, well-educated in the dominant British school, going over a hat-factory. On the shelves of the store, the first room he enters, are boxes containing hats. On the shelves of his mind are also boxes. There is a row labelled Diminishing Return Industries, Constant Return Industries, Increasing Return Industries. Above that a dustier row labelled Monopolies (with discrimination of three degrees) in Diminishing Return Industries, Constant Return Industries, Increasing Return Industries. On top again he can just read the dockets, Taxes on Monopolies in Diminishing Return Industries—and so on. He is aware that these boxes are not very prominent on the shelves of some economists of whose mental furniture he generally approves; but he received them from his masters and he has seen them handled with beautiful ingenuity by his friends. Yet from all his reading and conversations he cannot recall a scene in which anyone opened the boxes and said, with authority and convincing evidence, "Constant Return Industry, hosen; Increasing Return Industry, hats," or used any like words. Nor can he think of an industrial monograph in which profitable use was made of the Laws of Returns in commenting on the things of life. Perhaps he has himself tried to write a little monograph and remembers how, doubtless for lack of wit, he made of them no use; but how for this no one ever blamed him.

He takes down, in memory and when he gets home from his shelves, *Industry and Trade: A Study of Industrial Technique and Business Organisation*, with its nearly nine hundred pages packed full of the things of life. Two references to Constant Returns—one in a footnote—and a handful of references to Diminishing and Increasing Returns *im Allgemeinen*, not so far as he can find in close relation to the facts of those British, French, German and American Industries of which the great book has taught him so much: these seem to be all. He tries *The Economics of Welfare* to find that, in nearly a thousand pages, there is not even one illustration of what industries are in which boxes, though many an argument begins—"when conditions of diminishing returns prevail" or "when conditions of increasing returns prevail", as if everyone knew when that was.

The difficulty of supplying illustrations had been brought home to him that day in the hat factory. Whilst wandering among hollow copper cones to which hat-stuff miraculously adhered, shaping and pressing appliances, and dye vats, he had wondered—recalling the words with difficulty—whether "the increment of product due to the increase by a unit in the quantity of resources occupied in producing" hats is smaller (diminishing returns), or greater (increasing returns), "the greater is the quantity of resources so employed."[1] How should he conceive his unit of resources? How his increment of product? No one had given him any help here. Must he fix on a standard hat or a standard quantity of standard hat-stuff? It is physical output, the Great Analytics repeat, with which these Laws deal; so something of the sort seems necessary. He appreciates the wisdom of talking not of hats but of commodities.

Or how is he to conceive of "an industry"? Is it a national industry? The Great Analytics seem to assume this; though they are not perfectly explicit. But are they entitled to assume it? Ought he not somehow to take into account conditions in that place—now in Czecho-Slovakia—whence came the "Austrian velours hats" of which he hears so much among the hat factories of Denton? Discouraged, he falls back, most reluctantly, on generalities. As the world's population is still growing, presumably more units of resources, however conceived, are in fact being turned to hat-making. But only the most searching and difficult realistic inquiry could, he feels sure, even suggest the conclusion that, in this industry at this time, each "dose" of manufacturing resources means more standard hats.

Can the diminishing returns side help? Hats; chief raw materials, coal, rabbits' fur, shellac, leather for the inside band and pulp for the box. Coal seems easy; and an approximate solution there will help in so many other industries, in some of which the value of the product is thirty per cent. fuel cost, or more. To assert that the produce of mines conforms to the Law of Diminishing Returns is, he knows, "misleading."[2] But if the one raw material common to all industries is not to be brought within the scope of the Laws, all hope of dragging them out of the realm of the categories must be abandoned *in limine.* So the risk of misleading must be shouldered.

Nature's response to the miner is notoriously reluctant. A time must come in the history of the planet, as a time comes in the history of every pit, when equal successive "doses" of

[1] *The Economics of Welfare*, p. 120. [2] Marshall, *Principles*, p. 168.

resources will yield smaller physical returns. Economics, however, is not concerned with geological time; nor the Laws of Returns, if he has rightly apprehended them, with individual pits. The industry is the unit. For the moment he will think of a national industry, an old national industry, that of Britain. Have the new large-scale applications of resources, those great pit-sinkings on the Doncaster extension of the Yorkshire coalfield which the war interrupted, have they the effect of increasing or of only keeping constant the yield of coal "per unit of resources" in Britain? Or, in spite of their undoubted efficiency, is the return per unit for the whole industry actually diminishing, because elsewhere the working out of pits is rendering the successive "doses" applied to them less efficient? He does not know; but it seems not impossible that an approximate answer might be worked out—with a gigantic reservation which he sets aside for further thought.

That coal in Britain is being produced under conditions of diminishing returns is quite possible; but this is one of the cases in which we are least entitled to adopt a narrow national standpoint. One could hardly err in assuming that in Upper Silesia, or in the Transvaal, or in many parts of the United States the reverse is true; and as the world is fast becoming a single market for coal, and coal-mining a single world-industry like wheat-growing, any thorough inquiry would have not only to balance the virgin coal of Doncaster against the well-worked Lancashire field, but Britain against America or even against that wonderful coal-field through which, they say, the upper Yangtse-Kiang cuts its gorges. So far as our economist knows the work is not yet begun.

After coal, rabbits' fur: an awkward case: a joint-product too. Nature shows no reluctance to supply mankind with rabbits; but as a crop they compete with others. The rabbit-skin industry is distributed between Hampshire warrens, Belgian hutches, and Australian back-blocks. There is system in it, at least in the hutches and on the back-blocks; but its organisation, its internal and external economies, are elusive. The puzzled economist has no idea, and no notion how he shall begin to form an idea, whether it is or is not carried on under conditions of diminishing returns. Of the leather for the hat-bands he is more disposed to hazard a guess that diminishing returns prevail; but it is a guess, and there are all the problems of the joint-product and the sources of supply (some in old countries and some in new) which faced him when considering the rabbits.

Shellac and pulp for the boxes are more hopeful. From what he has read of the shellac "industry" and the lac insect he suspects diminishing returns. Things picked up in forests are apt to elude with greater and greater success intensive efforts to pick them up. But stay—is there any "cultured" shellac? That is a thing to be looked into; for, in the slightly similar case of wild and plantation rubber, he suspects that the transition from the wild to the cultured product marked a transition from diminishing to increasing returns upon each "unit of resources" devoted to rubber production. It looks almost as if a proof of increasing returns in rubber planting *might* be established statistically for the period 1905–22: it is, of course, the simple case of an organised large-scale industry on virgin soil, a Ricardian, or perhaps we should say a Careyite, rudiment. Shellac is not so easy. With a confession of ignorance, coupled with a strong guess of diminishing returns, he passes to pulp, the most hopeful of all his raw materials.

Common knowledge of the wastage of the world's timber—which was being treated rather as a stock, like coal, than as a crop, like rubber—supported by some study of timber price movements as compared with other price movements before 1914, did suggest definitely that "units of resources" applied to forest exploitation were yielding smaller physical returns. Whether this is true of wood-pulp is less certain. There the economies of an organised industry, the increasing returns tendency, have to be set against Nature's very obvious reluctance to supply mankind with timber indefinitely on the stock system. But it is likely that the pulp industry also, thanks more to human carelessness than to the niggardliness of Nature, is working under conditions of diminishing returns. Provisionally, and with hesitation, our economist was just about to conclude that the cardboard of his hat-boxes shows clear signs of Nature's reluctance to meet man half-way, when someone reminded him that this particular cardboard was made not of wood-pulp but of straw, ropes' ends, and the worn-out covers of railway wagons. Vegetable materials, no doubt, and against all such a suspicion of diminishing returns lies; but may not the improving organisation of the marine-store dealers and other handlers of "junk" come in on the other side? New processes have got between him and Nature: a new, long and none too hopeful inquiry into fact lies before him. He must, if honest, admit ignorance of the class of "returns" under which this cardboard is made. Finally he must balance all these uncertainties and ignorances on the

"diminishing" side against the equally stubborn ignorances—all of which there has not been space here to tabulate—on the "increasing" side. He leaves the factory with no formed opinion about the proper economic box for hats.

It may be said that the industry is not typical of industries generally. Certainly there is a special lack of decent organisation for the production of some of its raw materials and great difficulty in hitting on a representative finished product. But the same is true of many other trades; and incidentally it has been shown, or suggested, that coal itself cannot be boxed confidently. No doubt it is easy to take extreme cases on the "increasing" side and box them. Meccano Ltd., no doubt, are working under conditions of increasing returns. So, one supposes, are the Ford establishments and probably the car industry generally; but whether or not well-established industries, say textile machinery or locomotives, are working under decided conditions of increasing returns would be very difficult to determine. True, it seems most unlikely that mechanical industries with mineral raw materials, in the present state of the world's mineral resources, are producing under "diminishing" conditions; but no more can be said with any confidence. Wherever animal or vegetable materials are involved the element of uncertainty is greatly increased. And it was for these cases in particular that the conception of the balance of forces, man's organisation *versus* Nature's reluctance, was worked out. A strict interpretation of diminishing returns, as we know, excludes the mineral stocks. Then consider wool.

It is no use discussing "woollen cloth"; for there is no such thing. You might as well discuss a commodity. But there are standard products of the industry, reasonably uniform and regularly quoted. Take combed wool, "tops." If any problem in "returns" involving organic matter is soluble, that of 64's Botany tops should be. The wool is, by definition, all Australian; and if perhaps now and then some River Plate or New Zealand wool gets into the tops, that too is new country wool. "In the production of wheat and wool" (the tendency towards diminishing returns) "has almost exclusive sway in an old country."[1] The converse is no doubt true of a new one. But is Australia still "new"? There is keen competition between agricultural and pastoral interests and, in some districts, between sheep and cattle. The districts in which the fine merino wool used for 64's can be produced to perfection are limited; and as the supply

[1] Marshall, *Principles*, p. 319.

has grown but little, in spite of steady demand, it is likely enough that "conditions of diminishing returns" prevail. But just how the situation is now to be described, I do not know. A monograph, as yet unwritten, would be illuminating but might not be decisive. At present we are not justified in stating that Botany (*i. e.* fine merino) wool is being produced under the sway of either of the returns tendencies. On the other hand we are, I think, justified in stating that the tendency to increasing returns is not working strongly on the manufacturing side. The combing industry is highly organised and localised to an astonishing degree. Apart from combs run by some spinners, the combing plants are mostly large. Fresh ones are seldom set up, and it is unlikely that the building of new mills or the extension of those now existing would increase the efficiency of the industry disproportionately to the effort expended. This is almost a verbal repetition of what Dr. Marshall wrote long ago about the production of blankets. Supposing that Botany wool is, in fact, produced to-day under conditions of slightly diminishing returns, it is conceivable that 64's Botany tops are being turned out very near the mathematical point of constant returns. But we do not know.

Constant returns, it may be observed in passing, must always remain a mathematical point, their box an empty one. It is inconceivable that a method can ever be devised for so measuring these real but infinitely subtle and imponderable tendencies towards diminishing and increasing returns that someone will be able to say, Lo, here a perfect balance. If this is so, constant returns industries may be relegated finally to the limbo of the categories, in company for the present with such still disembodied phantoms as the "commodity whose elasticity of demand is unity."

In the passage where Dr. Marshall discusses blankets occurs the reservation referred to above as gigantic and set aside for further thought. The improvements in efficiency arising from the increasing size of an industry, to which Dr. Marshall attributes increasing returns, are, as I read him, not to include notable inventions, perhaps not inventions at all. They are improvements in organisation only. Referring to the blanket trade he writes, "an increase in the aggregate volume of production brings some new economies, but not many," because the trade is "already on so great a scale that any new economies that (it) may attain are more likely to be the result of new inventions than of improved organisation." I think Professor Pigou endorses this distinction between invention and organisation, but I am

not quite sure; he is less concrete in his treatment than Dr. Marshall, further from the clod and much further from machinery. The distinction, important as it is and clarifying of pure thought, discourages the student not of categories but of things. For, when trying to box an industry with the increasing docket, he must strive to think away that part of any additional output, coinciding with a fresh "dose of resources," which is due to invention, and concentrate on the part due to size and organisation only. Suppose he has just found out—it would be hard enough, perhaps not possible, but conceivable that the returns to the expenditure of resources in sinking of coal-pits near Doncaster are such as to show that even the British coal industry is still in the "increasing" stage; and that then someone tells him (I fancy it is true) that these pits would never have been sunk at the price in "resources" but for the modern invention by which loose and water-logged strata above the coal-measures are frozen artificially to facilitate sinking. Can he, like a schoolman, put this aside as an *accidens* and concentrate on the pure *substantia* of the growing industry apart from the invention? He is not tempted to try. If he were, quite certainly the boxes would always remain empty. Should the laws ever be rescued from the limbo of the categories, it could only be by treating industries as they are and lumping in inventions. Professor Pigou's definition quoted above would, I think, permit of this. You can pack much into the phrase, "a unit in the quantity of resources." It may prove difficult to suggest a concrete measure for the "unit of inventiveness," but it should not be much more difficult than measurement of the "unit of normal managerial capacity," which is obviously included in Professor Pigou's composite unit.

Perhaps some analytic, great or small, having read so far with impatience will be muttering quite loud, *connu, farceur!* Was it not obvious to you that we did not pretend to have set up measured units of managerial capacity, units of capital, and units of labour, compounded into a joint-unit of resources? Of course there are endless practical difficulties in fixing on standard units of product for particular industries and correlating them with the application of units of resources. Did not the rarity of illustrations in our discussion of "returns" indicate what we were doing? A standard hat is not a mathematical concept. We are generalising the bewildering detail of industry. Do you admit the logic of the conception of the laws of returns? Yes?

Well, we are building a framework into which we hope facts may in time be fitted. If those who know the facts cannot do the fitting, we shall regret it. But our doctrine will retain its logical—and, may we add, its pedagogic—value. And then you know it goes so prettily into graphs and equations. Besides, in the history of thought analysis has often outrun verification.

The answer to such a statement of the case depends, *first*, upon the measure of hopefulness or despondency with which one contemplates the task of translating the theory into the facts of those industries which one knows best; *secondly*, upon one's estimate of the final utility of such a translation if it could be made; and *thirdly*, upon one's personal opinion of the consequences of the outrunning of verification by analysis in Economics. Taking the last point first and speaking in the first person, as in such a case one must, I think a good deal of harm has been done through omission to make it quite clear that the Laws of Returns have never been attached to specific industries; that the boxes are, in fact, empty; that we do not, for instance, at this moment *know* under what conditions of returns coal or boots are being produced. If unwary, one might read *The Economics of Welfare*, a book which from its title would not appear to be an essay in "pure economics," without apprehending this; and I suspect that many students do so. I myself did not appreciate how completely empty the boxes were until I had given a number of public demonstrations with them. And if more acute minds are not likely so to be misled, the rank and file surely are. Unless we have a good prospect in the near future of filling the boxes reasonably full, there is, I hold, grave danger to an essentially practical science such as Economics in the elaboration of hypothetical conclusions about, say, human welfare and taxes in relation to industries which cannot be specified.

Next, supposing we did, after much labour, ascertain definitely that coal in England was being produced under conditions of slightly diminishing and 64's Botany tops under conditions of slightly increasing returns—what would be the utility of the knowledge, apart from the satisfaction of a legitimate scientific curiosity? Professor Marshall has stated that "*other things being equal*, the Finance Minister should press on products of Decreasing Return industries rather than on products of Increasing Return industries,"[1] and there is a considerable literature, with few illustrations, on the working of taxes upon commodities under different assumptions as to returns. But I think we may take it that the italicising of the "other things being

[1] *Industry and Trade*, p. 405 n.

equal " is a scholarly reminder that this is not a bit of political advice; for it is hard to think of cases in which other things would be equal, since Diminishing Return industries, if we can lay them by the heels, are likely to prove nearer the raw material, so to speak, and so less eligible for taxation, than Increasing Return industries. If not a safe guide to taxation, would the knowledge affect social, industrial or commercial policy? At the moment I can think of no advice which I should give to a working wool-comber, top-maker, spinner, merchant or reformer of social conditions in the worsted trade, as a result of the decision that 64's Botany tops were being produced under conditions of slightly increasing returns. Long before scholars had established that British coal was being produced under conditions of slightly diminishing returns, the resultant price rise relative to the price in increasing return areas would have stimulated organisation and invention to restore at least a state of constant returns, were that in any way possible. In all these matters the economist is, willy-nilly, an historian. The world has moved on before his conclusions are ripe.

And with how much hope does one face the establishing of these conclusions? The instances referred to so far have not been very encouraging. Looking backwards over long periods the task can be approached with some hope, provided one does not seek too great precision, does not, for instance, try to separate the effects of organisation from those of invention. The fact that the iron-work required to build a church cost about as much in sterling in 1913 as when Sir Christopher Wren was estimating for City churches, after the great fire of London,[1] alone indicates an enormously increased return to invention and organisation combined during the intervening two centuries and a half. But to prove that any standard grade of iron—No. 3 Cleveland pig or crown bars, let us say—has been turned out since the war under any particular condition of returns is a different matter. I can at present see no way of giving reality to the " unit of resources " : though that by no means proves that there is no way. If it were given reality, some appreciable period of time would be necessary during which successive " units " would have to be applied to the industry, and the physical outputs measured. The allowance of time might have to be so long as to " make history " of the inquiry : its results might be true only of yesterday. Again the experimental difficulties appear, though they may not prove to be, insurmountable. No one, so far as I know, has begun to attempt to surmount them.

[1] W. G. Bell, *The Great Fire of London*, p. 282.

If it is judged worth while to make a serious and concerted effort to fill the boxes—of which I am doubtful—a beginning might be made with some of the simple industries which it is customary to assume are working under conditions of diminishing returns. Do we really know that wheat, world wheat, is produced under those conditions? Or wool, or cotton? Some rough suggestions have been thrown out above as to timber, rubber and coal: the two first are the most hopeful. Before we know how much reluctance on the part of Nature we have to overcome, it is rather vain to speculate on the extent of our achievement in overcoming it and establishing conditions of increasing returns. Nature's reluctance varies presumably with the proportions of virgin and non-virgin soil, forests, coal measures and so forth to the total quantity of each being exploited at a given time for the production of a given raw material or food-stuff. In special cases, of which rubber may be one, she may for the time being be not reluctant at all. Easy generalisations about the Law of Diminishing Returns being necessarily true, because if it is not you might feed the world from a square yard, will help little in the discussion of these world-problems.

As to Increasing Returns: if we are to restrict the conception as, I believe, Dr. Marshall does, to the increased efficiency resulting from the improved organisation which generally accompanies an increase of capital and labour in any industry, or in industries in general,[1] to the exclusion of the efficiency flowing from invention—and a very good case can be made out for such restriction—then, I think, we should on principle avoid even the suggestion that we know that particular industries come into the "increasing" category, because we never can know what proportion of their efficiency is due to organisation resulting from mere size and what to invention. This is not a denial of the reality of increasing returns in this sense, only a denial of their measurability. If, on the other hand, we widen the conception as suggested above so as to cover all inventions, we can arrive at certain tolerable historical results; but, as I think, we shall be permanently held up by "experimental" difficulties in dealing with the present and, *a fortiori*, with that near future which is so particularly interesting to the working economist. If I am wrong, and there are ways over any or all of the difficulties, which someone can point out, these mainly destructive notes may have constructive uses.

J. H. CLAPHAM

[1] See the definition in *Principles*, p. 319.

TRADE BOARDS AND THE CAVE COMMITTEE

The Cave Committee on the working and effects of the Trade Boards Acts has completed the work that was entrusted to it. It was, however, necessarily confined to a small part of what is really a single problem of international range, namely Government interference with wage-rates generally. The narrow issues that the Committee had to study can, I think, be illuminated if they are put in a wider setting.

In modern times, until some five-and-twenty years ago, it was the general policy of governments to leave wages severely alone. At the present time, however, over nearly the whole of the English-speaking world that policy has been abandoned. It has been abandoned under the influence of two dominant motives. On the one side, the inconvenience and loss caused to the public by stoppages of work in important industries has driven governments to seek some means of averting these stoppages. On the other side, humanitarian sentiment has been shocked at the conditions prevailing in what have been somewhat ambiguously called "sweated industries," and governments have intervened with intent to prevent sweating. It is interesting to observe how these two motives have worked themselves out in practice. In origin they are entirely distinct, but in their concrete manifestations they have moved more and more closely together.

The desire to obviate stoppages of work has often translated itself into forms that do not involve any direct interference with wage-rates. Thus, Government Departments offer their services in mediation, encourage the formation of voluntary Joint Boards of employers and employed to negotiate wages questions, require the taking of a second ballot before a strike is declared, forbid, under penalties, the declaration of a strike or lock-out before opportunity has been afforded to an impartial tribunal to investigate disputes and recommend terms of settlement, and so on. In none of these arrangements is there any direct determination of wage-rates by public authority. But in some countries these arrangements have not been deemed sufficient, and it has been desired, either generally or in industries of exceptional importance, actually to forbid stoppages of work by law.

When this stage is reached, and when employers and employed are compelled to carry on though they cannot agree upon terms, it becomes necessary for the public authority to add an order fixing these terms to the order to carry on. If it did not do this, the order to carry on would obviously lead to chaos. In this way, the desire to prevent stoppages of work has become embodied in systems of compulsory arbitration, the best known of these being that of New Zealand, under which the public authority, through officially controlled Boards or Court, directly determines what the wage-rates are to be.

In like manner, the desire to prevent sweating has evolved forms of State action that do not carry with them any direct impediment to stoppages of work. Wages Boards or Trade Boards are set up, and through them the State announces certain minimum standards of wages, just as under the Factory Acts it announces certain minimum standards of sanitation and safety, below which employers must not, on pain of punishment, descend. This does, of course, indirectly rule out one possible form of stoppage of work, namely a lock-out by employers designed to compel the acceptance of wages below these minimum standards. But directly nothing is done against any class of stoppage, and neither directly nor indirectly is anything done against that class of stoppage which originates in a demand by the work-people for wage-rates higher than the legal minimum. Just, however, as we have seen that the desire to prevent stoppages has sometimes pushed forward into the territory of wages settlements, so sometimes the desire to prevent sweating has pushed forward into the territory of legal sanctions against stoppages. Thus in Victoria, under an amending Act of 1907, it is provided that, if workpeople in an industry bound by the determination of a Wages Board undertake a strike, the Government may suspend the whole or part of the determination for the period of a year. This provision in effect imposes a penalty on strikes, because, generally speaking, the suspension of a determination will involve the temporary abrogation of some obligations upon employers that are of advantage to the workpeople. In Tasmania, where the Victorian system has been adopted, the Wages Board Act forbids, under severe penalties, a lock-out or strike on account of any matter in respect to which a Board has made a determination.

This tendency towards an assimilation between the practical manifestations of the desire to prevent industrial stoppages and the desire to prevent sweating has been associated with, and is,

no doubt, in part due to, a widening in the scope of these desires themselves. The desire to prevent industrial stoppages is naturally most potent in regard to industries of fundamental social importance. Thus, the Canadian Industrial Disputes Investigation Act is limited to industries of this class, and the New South Wales Industrial Arbitration Act of 1918 only makes unconditionally illegal strikes on the part of employees of Central or Local Government authorities. It is not, however, possible to distinguish industries into two rigidly divided groups, one of which is socially important while the other is not. The distinction among them can only be one of degree. Hence, it is natural to find that authoritative action to prevent stoppages of work is not everywhere confined to certain selected industries. In South Africa and in Colorado the principle of the Canadian Act has been extended over a wider field, and in New Zealand, as is well known, the compulsory arbitration law applies to all industries, except those in which the workers have refused to be registered under the Industrial Conciliation and Arbitration Acts. In the same way the desire to prevent sweating, which manifested itself first in the formation of Wages Boards in selected ill-organised and ill-paid occupations, has, in Victoria, expanded into a desire to prevent unfairly low wages in a more general sense. The number of occupations covered by Wages Boards in that country has grown, till at the present time Boards have been appointed in practically all of them. We may conclude, therefore, that, though the root ideas underlying compulsory arbitration systems and the Wages Board system respectively are quite distinct, and are, moreover, in their purest forms, relevant to different classes of occupation—for it so happens that in most countries workpeople in the industries of greatest social importance are not ill-organised or low-paid—yet the legal arrangements evolved out of them have everywhere much in common, and sometimes, as in Tasmania, become indistinguishable.

In order that this conclusion may be clear-cut, it is desirable to remove a rather common confusion of ideas. It is sometimes supposed that the Compulsory Arbitration method and the Trade Board method differ from one another fundamentally, in that under the former it is a *standard wage*, and under the latter a *minimum wage*, that is determined. In *one* sense this is true. The wage determined by a compulsory arbitration court is an absolute wage, in that it is illegal either for employers to fight for less or for workpeople to fight for more; and the wage determined by a Trade Board, under the English plan, though not on

the Tasmanian plan, is a minimum wage, in that it is illegal for employers to fight for less but not illegal for workpeople to fight for more. Under compulsory arbitration the awarded wage and nothing else is the lawful wage; under Trade Boards (on the English model) the awarded *or any higher wage* is a lawful wage. This, however, is not the sense in which the relation between the standard wage of compulsory arbitration and the minimum wage of Trade Boards is commonly understood. Many people think that, if in two exactly similar industries a Court was called upon to fix a standard wage and a Trade Board to fix a minimum wage for exactly similar classes of workpeople, the minimum wage fixed by the Board would be substantially less than the standard wage fixed by the Court. This is not so. In respect of any given category of workpeople, Court or Board alike would aim at what they consider to be the *proper* wage for *ordinary* workers in that category. The so-called minimum wages of Trade Boards are not intended, in respect of any given category of workpeople, to be fixed at a level substantially below what is ordinarily paid, thus serving merely as a kind of safeguard against eccentric employers. Trade Boards, no less than Arbitration Courts, aim at determining the rates of wages that will actually be paid in their industries. When a piece-rate is announced by either sort of body, this is intended to be the piece-rate payable to all employees. When a time-rate is fixed, Court and Board alike are settling the wage appropriate to a worker of representative strength and skill. For both of them the rate is a *minimum*, in the sense that workers of strength and skill greater than the ordinary may expect better pay; and by both provision is made to allow workers whose strength and skill is abnormally small to be paid less than the " minimum " rate. In this matter, therefore, the two systems are upon all fours. Under both of them the task of the public authority is to announce, not an ineffective minimum, but the rate of wage it deems *proper* to a defined grade of worker in the industry it is reviewing.

We are thus led on to inquire what precisely legislators, when providing machinery for Government interference with wages, have conceived a *proper* rate to mean. It might mean either what we may call an economic wage, namely the wage which, in the conditions of the trade under review, economic forces tend to bring about if employers can be prevented from taking advantage of the bargaining weakness of some or all of their workpeople and paying them less than they are worth; or it might mean a " living wage," interpreted on the basis of some opinion as to

what is reasonably necessary for a civilised man or woman with a normal family. It is obvious that these two sorts of *proper* wage, translated into terms of money, may, on occasions, mean very different things. Unless, therefore, legislatures provide guidance for the wage-regulating bodies they set up, there can hardly fail to be uncertainty and confusion. Consequently, there have been introduced into the laws of several of the Australasian colonies governing words of greater or less precision. In the Victorian law of 1903, it was provided that determinations should be based in each industry on the rate of wage actually paid by "reputable employers" to workers of average capacity in that industry. This rule, which in effect signified that the proper wage was to be taken to mean an "economic wage," was, however, repealed in 1907. In the 1912 Act, Section 175 laid down: "Where any determination made by a special board either before or after the commencement of this Act, is being dealt with by the Court, such Court shall consider whether the determination appealed against has had or may have the effect of prejudicing the progress, maintenance of, or scope of employment, in the trade or industry affected by any such price or rate; and, if of opinion that it has had or may have such effect, the Court shall make such alterations as, in its opinion, may be necessary to remove or prevent such effect, and at the same time to secure a living wage to the employees in such trade or industry who are affected by such determination." This suggests that the proper wage is to mean *both* an economic wage *and* a living wage, and the possibility of conflict between these two ideals is ignored. In the Queensland Act of 1916 "the wage awarded must be not less than sufficient to maintain a well-conducted employee of average health, strength, and competence, and his wife and a family of three children in a fair and average standard of comfort, having regard to the conditions of living prevailing among employees in the calling."[1] The first part of this provision suggests that the living wage is to be adopted as the sole standard, but the last part belies this suggestion, because, of course, the conditions of living prevailing among employees in the calling depend on their customary earnings, and, therefore, are related to the economic wage of the calling. In other States, however, a more definite position is taken up, and it is laid down, in effect, that in making their awards, Courts or Boards shall regard the living wage as a minimum, below which they must in no event go. Thus, the South Australian Industrial Arbitration Act of 1912 lays down:

[1] Gilchrist, *Conciliation and Arbitration*, p. 104.

"The board shall not have power to order or provide wages which do not secure to the employees affected a living wage. Living wage means a sum sufficient for the normal and reasonable needs of the average employee living in the locality where the work under consideration is done, or is being done. In the Western Australian Act, it is provided that "no minimum rate of wages or other remuneration shall be prescribed which is not sufficient to enable the average worker to whom it applies to live in reasonable comfort, having regard to any domestic obligations to which such average workman would be ordinarily subject."[1] Finally, in the New South Wales Act of 1918, these general rules are given a statistical interpretation. The Board of Trade is ordered, after public inquiry into the cost of living, to declare from year to year what shall be the living wages respectively of male and of female adult employees (other than those who are abnormally inefficient) in the State or any defined area thereof, and no industrial agreement shall be entered into, and no award made for wages lower than such living wages. What it all comes to is that in the various colonies whose laws I have been citing, as between the *living* wage and the *economic* wage, that one of the two which in any particular industry is higher must be taken, by Courts or Boards determining the pay of ordinary workers, to be the *proper* wage.

The law cited from New South Wales brings into view yet another possible arrangement; namely the establishment, either alongside of, or instead of, the special determinations made by Wages Boards, of a general nationally determined minimum wage. The New South Wales rule involves this. It does not merely give an instruction to the Boards and Court before which particular wage issues may come: it applies also to settlements made by agreement of the parties. It is true, of course, that the Legislature has not itself translated its living wage into terms of actual money. This task is left to the Board of Trade, and is to be undertaken every year on the basis of the cost of living. This, however, is a matter of detail, not of principle—a recognition of the fact that prices vary, and that it is more convenient to take account of these variations by administrative regulations than by legislative amendments. It should not prevent us from regarding the New South Wales law as one that fixes directly national minimum wages at a living level—a level, it should be borne in mind, which may be different for men from what it is for women workers. These national minimum wages do not, of course,

[1] Bulletin of the U.S. Bureau of Labour Statistics, No. 167, pp. 165-7.

mean wages below which nobody may be hired to industry. The intention underlying them is that ordinary workers of the lowest grade who are of sound mind and body shall not be engaged to work in any industry for a less sum than common opinion regards as capable of yielding a reasonable subsistence: and special provision is made, as under the more detailed rules laid down by Wages Boards, for allowing abnormally inefficient workers to be engaged at a lower rate. In the State of Washington there is, for women workers, a State minimum wage law on the same general basis as the New South Wales law.

This general background should enable us to envisage more clearly the nature of the problem which the Cave Committee had to consider, and to estimate better the value of their work. In view of the strong opposition that prevails in this country to compulsory arbitration or prohibitions against strikes, they did not need to contemplate the development of our Trade Board system on the lines of the Tasmanian law. They were, however, called upon to examine actual and proposed extensions of our system to cover workpeople belonging to different categories from those at first included in it. In the Act of 1909 it was laid down, as a condition for establishing a Trade Board in any industry or branch of industry, that the rate of wage prevailing there " is exceptionally low as compared with that in other employments." In the Act of 1918 this condition was abrogated, and there was substituted for it a new condition, namely that the Minister of Labour is " of opinion that no adequate machinery exists for the effective regulation of wages throughout the trade, and that, accordingly, having regard to the rates of wages prevailing in the trade or any part of the trade, it is expedient that the principal Act should apply to the trade." The new Act was followed by a large increase in the number of Boards; and, furthermore, Boards, instead of merely fixing rates, as had hitherto been the custom, merely for the lowest grade of ordinary workers in the trade, leaving skilled and semi-skilled workers unaffected, took to fixing different rates for different classes of workers, even on some occasions for foremen earning over £4 10s. a week (Report, p. 11). This was a large step forward from the original intention of the 1909 Act. While most people were willing to forbid employers, under penalty, to force down a poor unskilled worker's wage below, say, 30s. a week, without putting any corresponding prohibition on the workman's trying to force the wage up, there was strong opposition to a one-sided arrangement of this sort as regards high-waged skilled men. The

existing state of things was anomalous: it was necessary either to go forward on Tasmanian lines, and make the Trade Boards' determinations enforceable against workpeople as well as against employers, or to restrict more narrowly the scope of the Boards' activities. The Cave Committee favour the second alternative. "It appears to us," they write, "that, while the coercive powers of the State, and particularly of the criminal law, may properly be used to prevent the unfair oppression of individuals and the injury to the national health that results from the 'sweating' of workers, the use of those coercive powers should be limited to that purpose, and that any further regulation of wages should be left, so far as possible, to the processes of negotiation and collective bargaining. It is one thing to say that an employer shall not pay to his adult worker a sum insufficient for his or her maintenance under the conditions of the time, be the sum 35*s.*, 40*s.*, or 50*s.* per week; it is quite another thing to provide that he shall not pay to a skilled worker of a particular class less than 70*s.*, 80*s.*, or 90*s.*, even though the worker is prepared to work at a lower wage, and that, if he does so, he shall be liable to fine or imprisonment. It may be desirable that the higher wage should be paid, and it may not be unreasonable for a trade organisaton to insist on that wage being paid and to enforce its decision by economic means; but to compel the payment by the threat of criminal prosecution appears to us to be an oppressive use of the powers of the State" (pp. 26–7). The Committee accordingly recommend that the Minister of Labour should not be empowered to apply the Act to a trade unless both an unduly low wage prevails in the trade or some branch of it, and "there is lack of such organisation among the workers as is required for the effective regulation of wages in the trade" (p. 28). They recommend, further, that the Boards should only be empowered to fix legally binding minimum rates in respect of ordinary workers of the lowest grade in the trades covered by them; rates for other grades of workers not being determinable unless three-fourths of the representatives of each side agree upon a recommendation and invite the Minister to enforce it. It will thus be seen that the Committee are desirous of lopping off the accretions that have grown upon the original Trade Boards Act of 1909, and of not extending direct legal interference with wages beyond classes of workpeople who are, in popular language, sweated, or liable to be sweated.

Let us now turn to the principles on which determinations are to be based. The Committee agree with the general practice

of allowing subnormal workers to be paid a lower rate per day (not, of course, a lower piece-rate) than that determined for normal workers. They point out that at present, under the English law, permits may be granted only for persons "affected by any infirmity or physical injury," and they recommend that they should also be obtainable in respect of "the 'slow worker,'" *i. e.* "the person who, while not subject to any infirmity or physical injury, is yet incapable, owing to some constitutional defect or to some other cause, of earning the minimum rate fixed for the ordinary worker of his class" (p. 34). This, however, is comparatively, though not absolutely, a small matter. Much more vital is the question what principles Trade Boards should follow in determining the wages to be paid to ordinary workers; or in other words, what meaning they should assign to the notion *proper* wage. In neither the 1909 Act nor the 1918 Act did Parliament give any guidance on this important matter. The natural result followed: "Some Boards," the Cave Committee report, "have had regard only to the cost of living, while others have taken into account the value of the work done and the charge that the trade can bear. In one case we were informed that the minimum was taken to be the lowest wage payable to the least skilled worker in the cheapest living area covered by the rate; while in another it was defined as a wage sufficient to provide a young woman of eighteen with means sufficient to enable her to maintain herself without assistance, and to enable a man of twenty-one to contemplate marriage. Partly as a consequence of this diversity of interpretation, wide differences are found in the rates fixed" (Report, p. 26). The issue is thus plainly stated, and we naturally look to the Committee to offer a solution. We are, however, disappointed. The Boards, we are told, should aim "at giving protection to the workers in each trade by securing to them at least a wage which approximates to the subsistence level in the place in which they live and which the trade can bear" (p. 28). This is mere shirking, on the model of the Victorian Act of 1912. The last six words destroy those which go before and leave an unmeaning chaos.

On the subject of a national minimum wage law, the Committee are more definite. They discuss the enactment of such a law (from which abnormally inefficient workers may obtain exemption) as a substitute for the Trade Boards. It seems fairly clear that any national minimum wage would have to be put at a level appropriate to the lowest grade of ordinary worker (though there might, of course, be different

minima for men and women) in the lowest grade industry. Thus, it would fail to protect from exploitation any one of a grade better than this, and so, though nominally of wider reach, would really be of narrower reach even than the modest system of Trade Boards contemplated by the 1909 Acts. In this connection there is also a serious technical difficulty in the definition of ordinary workers. It may happen that certain occupations are predominantly manned by an exceptionally slow type of unskilled labourer; so that, say, the unskilled man one-tenth of the way down the scale of capacity in one occupation corresponds to the unskilled man nine-tenths of the way down in another. Under a national minimum wage we should either have to make our minimum *appropriate* to workers who, from a general point of view, are not ordinary, but "slow" workers, or to exempt from it practically all the unskilled workers in certain occupations. This awkwardness is avoided under the Trade Board system. Again, as the Cave Committee point out, "in some industries, the home-worker cannot be adequately protected except by fixing minimum piece-wages, and it is clear that such rates cannot be fixed on a national basis for all trades" (p. 25). Yet again, a law enacting a national minimum wage, though, as in New South Wales it could make provision for variations in the cost of living from time to time, could not as effectively as a system of Trade Boards make provision for variations from place to place. For reasons such as these the Committee is opposed to the enactment of a national minimum wage as a substitute for Trade Boards. Its enactment as an addition to them they do not discuss. Granted, however, that Boards are installed over a wide enough field and operate satisfactorily, there seems little to be gained by creating a new form of machinery. It may be inferred from their silence that the Committee take this view.

A. C. PIGOU

SOME CAUSES OF THE INCREASE OF POPULATION IN THE EIGHTEENTH CENTURY AS ILLUSTRATED BY LONDON

WHILE the causes of the great increase in population which became obvious in the nineteenth century are to some extent obscure, it is clear that during the eighteenth century many factors were at work, lessening the terrible death-rate of London. The great controversy of the eighteenth century as to whether the population of the country was increasing or decreasing was largely based on varying interpretations of the London Bills of Mortality. From these it was alarmingly evident that the annual deaths in London greatly exceeded the births and that this excess represented a drain on the rest of the country. "Let the country gentlemen be called forth and declare," wrote Corbyn Morris in 1751, "have they not continually felt for many years past an increasing want of husbandmen and day-labourers? Have the farmers throughout the kingdom no just complaints of the excessive increasing prices of workmen and of the impossibility of procuring a sufficient number at any price? . . . These are the direct consequences flowing from this vast annual destruction of country adults and non-adults also . . . in London. . . . London will not feel any want of recruits till there are no people in the country. . . ."[1] Three years later another observer wrote: "London has grown, and continues still to grow, out of compass at the expense of and to the sensible diminution of the other towns and boroughs, at the expense, in short, of the class of labourers."[2]

This was the "great wen" theory which had prevailed at least since the time of the Tudors. There was another theory, namely that the population of London like that of the country was decreasing, and as a matter of fact between 1720 and 1750 the population "within the Bills of Mortality" seems actually to have declined.

The Bills of Mortality, the weekly, monthly and yearly

[1] *Observations on the Past Growth and Present State of the City of London*, p. 106.

[2] "Sir John Nickolls" (a Frenchman), *Remarks on the Advantages and Disadvantages of France and Great Britain*, p. 188.

summaries of christenings and burials compiled by the Company of Parish Clerks, were unsatisfactory as a record of births and deaths, as only baptisms and burials in parish churches and burial-grounds were registered. The Bills—the name was extended to the area covered by the returns—stood for the greater London of the seventeenth century. They included, for instance, the parishes of Hackney, Bermondsey and Bethnal Green, which at the beginning of the nineteenth century were still partly rural. But they did not include the parishes into which London had more recently expanded. "London is increasing more rapidly than appears," Price wrote in 1769, "by the omission of the two parishes most increased by new building, Marybone and Pancrass; the former is now, I suppose, one of the largest in London."[1] From time to time new parishes appeared in the Bills, but these were subdivisions of parishes which had become more thickly populated and did not extend the area covered by the records.

As a basis for an estimate of the population of London the Bills became increasingly inadequate owing to the rapid growth of the non-included parishes. As a basis for a calculation of the relation of births to deaths they were also defective; first, because the baptisms as a record of births were generally admitted to be more deficient than the burials as a record of deaths;[2] secondly, because after the middle of the century it is possible that the number of burials outside parish burial-grounds increased, owing to an increasing number of Jews and of Irish Roman Catholics in London and to the starting of private venture burial-grounds with lower fees than those of the parishes.[3] Thirdly, the Bills

[1] "Observations on the Expectation of Lives," *Philosophical Transactions*, LIX, p. 108 n.

[2] "None of the births among Jews, Quakers, Papists, and the three denominations of dissenters are included in the Bills, whereas many of their burials are." Price, *op. cit.*, p. 100 n. Wales, Price's opponent in the population controversy, agrees with him on this point; see *Inquiry into the Present State of the Population of England and Wales*, 1781, p. 11. Private baptism, allowed by the Church for "great cause and necessity," was fairly general, the cause being sometimes the difficulty of obtaining godparents, and such baptisms were in some parishes refused registration. See Rickman's *Preliminary Observations* to the *Population Returns* of 1811, p. xxiii.

[3] "Dissenting burial-grounds at fees very much smaller than those of the established church are to be found in many parishes, and this is the cause"—[of the supposed decrease in population].—Malcolm, *Londinium Redivivum*, III, p. 230. Malcolm attributed a decrease in baptisms in Whitechapel after 1783 to the great increase in Jews and a decrease in the burials to "a number of cheap burial-grounds." Lysons found in 1795 that an excess of baptisms over burials at Bethnal Green was "to be attributed to some private burial-grounds where the fees are somewhat lower than in that belonging to the parish." *Environs of London*, II, p. 27. This is, however, controversial. Price wrote in 1780 "[the

themselves were inaccurate compilations from the parish registers.[1]

With all their deficiencies, however, the Bills of Mortality give a remarkable picture of the fluctuations of the London death-rate and birth-rate, and of the variations in the causes and ages of death, which though inaccurate we may accept as broadly true, and which is corroborated by evidence from independent sources—poor law records, and the records of schools, hospitals and dispensaries. William Heberden the younger, a London doctor of great experience, wrote in 1808: "The Bills of Mortality have often been objected to as erroneous and imperfect sources of information and unworthy of credit. This charge is not without foundation, though by no means to be admitted to its full extent. For what they want in accuracy is in a great measure supplied by their magnitude, the large scale upon which they are constructed making their smaller errors inconsiderable. . . . But the surest testimony to their credibility is afforded by the Bills themselves, whose agreement with each other is quite inexplicable upon any other supposition than that of their being drawn from the uniformity of nature and truth." [2]

Dr. Price, the leader of the pessimists in the population controversy, maintained in 1780 (in spite of his admission in 1769 that London was increasing) that "even London was more populous at the Revolution than it is now." [3] In 1783 he estimated that the population of England and Wales had decreased by a million and a half since the Revolution; "the inhabitants of the cottages thrown down in the country fly to London, there to be corrupted and perish.[4] . . . In London those who used to live plain must now live high, those who used to walk must now be carried. This is the reason of the increase of consumption and buildings in London and not an increase of the inhabitants,

Bills] are indeed defective, but in consequence of a great decrease of dissenters they are less so than they used to be." *Essay on Population*, p. 60. The French Protestants of Spitalfields gradually became "blended with the English." Hale, *A Letter to Whitbread*, 1806.

[1] See Rickman's comparison of Baptisms and Burials in the Parish Registers and in the Bills of Mortality, *Population Returns*, 1811, Appendix, p. 200. See also Ogle, "An Inquiry into the Trustworthiness of the old Bills of Mortality," *Journal of the Statistical Society*, September 1892.

[2] "On the Mortality of London," College of Physicians, *Medical Transactions*, IV, p. 103.

[3] *Essay on the Population of England and Wales*, p. 55. His arguments were based partly on the Bills of Mortality, partly on the returns of houses for the purpose of the window tax and inhabited house duty.

[4] *Observations on Reversionary Payments*, ed. of 1783, Supplement II, p. 256.

for the number of inhabitants is certainly (if any regard is due to the Bills) less now than it was thirty years ago." [1]

The controversy was ended by the census of 1801 followed by that of 1811, which proved what Price's opponents had maintained, that the population of England and Wales had increased during the eighteenth century, slowly at first and rapidly after 1780, and that that of London had done the same, though, owing to the more rapid increase in the industrial north and west, at a lower average rate than that of the country as a whole. The population for the eighteenth century was calculated from the registered baptisms (according to the parish registers) on the assumption that these bore the same relation to the total population that they did in 1800.

On this basis it was estimated that the population of London (including five parishes not within the Bills, Marylebone, St. Pancras, Paddington, Kensington and Chelsea) was 674,500 in 1700 and 676,750 in 1750, as compared with the 900,000 of the census returns of 1801.[2]

If the parishes without the Bills are omitted, the slight increase in population between 1700 and 1750 disappears and there is actually a decrease from 665,200 to 654,400. While Westminster and the out-parishes had increased, the City and Southwark, the oldest and most crowded parts of London, had decreased. As the population had certainly increased from

[1] *Observations on Reversionary Payments*, ed. of 1783, Supplement II, p. 257 n.

[2]

	1700	1750	1801	1811
1. City of London within the Walls	139,300	87,000	78,000	57,700
2. City of London without the Walls	69,000	57,300	56,300	68,000
3. The Borough (the five Southwark parishes) ..	100,000	94,700	98,700	75,000
4. The City and Liberties of Westminster	130,000	152,000	165,000	168,600
5. The out-parishes within the Bills of Mortality (in Middlesex and Surrey) ..	226,900	258,900	379,000	518,700
6. The five parishes not within the Bills of Mortality	9,150	22,350	123,000	162,000
Total	674,350	676,250	900,000	1,050,000
Population of England and Wales	5,475,000	6,467,000	9,168,000	10,488,000

The returns for London in 1801 and 1811 are those of the census enumerations with the addition of a twenty-fifth for the floating, non-resident population.

1700 to 1720, the check between 1720 and 1750 is greater than appears from the figures.[1]

Contemporary estimates of the population and interpretations of the Bills of Mortality are interesting examples of the strange pessimism of the eighteenth century which existed side by side with so much equally strange complacency. The growth of industry and commerce resulted in a shortage of labour in certain districts and occupations, and this was taken as evidence of depopulation. The growth of London in bricks and mortar was obvious, but this is how it was explained by Price in 1779: "The increase of buildings in London has for several years been the subject of general observation. It deserves particular notice that it is derived from the increase of luxury, an evil which, while it flatters, never fails to destroy. It has been shown from authentic accounts that the decrease of the lower people in London and Middlesex has kept pace with the increase of buildings. The annual deaths alone in the Bills of Mortality have for many years been decreasing, and are now 6,000 per annum less than they were fifty years ago. In particular it is observable with respect to London within the City walls, that though always filled with houses, the births and burials, and consequently the inhabitants, have decreased one half. The just account of this must be that those who cannot now satisfy themselves without whole houses or perhaps two or three houses . . . used formerly to be satisfied with lodgings or with parts of houses."[2] A decrease in the death-rate is taken as a proof of a decline in the population, and a less concentrated and crowded manner of living is taken as an increase of luxury.[3]

[1] As this estimate is based on the birth-rate it is possible that the apparent decline in population did not take place. An estimate based on the death-rate would show an increase. In this period the great increase in recorded infantine mortality (under the head of "convulsions, chrisoms and infants") suggests that there must also have been an increase in the infants who died unbaptised, and therefore escaped registration in either baptisms or burials. Cf. Heberden, *Observations on the Increase and Decrease of Different Diseases*, 1801, p. 32: "It is not easy to account for the diminution of christenings between the years 1740 and 1760. But it may be observed that the number of females buried in the same twenty years not being sensibly lessened, the defect seems to have arisen from the smaller proportions among them who bore children. Whatever be the cause of this, the christenings appear, in fact, to have been fewest at a time when the burials were nearly at the highest."

[2] *Observations on . . . the Population in England and Wales* (Appendix to Morgan's *Assurances*, p. 274).

[3] This curious interpretation of luxury is well illustrated by Price's account of the population of Birmingham:

1700	Inhabitants	15,042, 6 to a house.
1750	,,	23,688, $5\frac{7}{18}$ to a house.
1770	,,	30,804, $5\frac{1}{5}$ to a house.

While Price and his followers were wrong in their deductions from the Bills of Mortality, the Bills were certainly confusing and disconcerting. Before 1750 the decrease of births and the increase of burials were the cause of well-founded alarm. After 1750 the decrease in burials, due to a declining death-rate, and partly perhaps to the peculiarities of the Bills, was often interpreted as a sign of a declining population.

By 1740 it had become evident that the number of christenings was decreasing and that of burials increasing, and many calculations were made of the great "waste of life" caused by the excess of deaths over births. The figures were indeed alarming. The baptisms increased from the beginning of the century till 1724, when they were 19,370, and then decreased till they reached their lowest point, 13,751 in 1742. They continued at a low level till 1760 and then began slowly to increase. At the very time at which the baptisms were lowest, the burials reached their highest point, 30,811 in 1740 and 32,169 in 1741. They did not again during the century come within 4,000 of this maximum, in spite of an increased population, and after 1750 it became apparent that they were gradually decreasing.

The "waste of life" recorded in the Bills was at its worst since the days of the plague between 1727 and 1750. From 1728 the ages of those dying were given in the Bills, and it became apparent that the great mortality was chiefly among children. The population of London was only kept up by immigrants from the country who had passed the dangerous first years of life, and yet the percentage of deaths is estimated to have been 1 in 20 in 1750.[1]

Corbyn Morris, writing in 1751, estimated that the decline in the population was chiefly owing to the smaller number of children under ten, and was due to "two melancholy causes—a less number of annual births and a greater proportion of what are born dying in their first infancy, the numbers who survive being chiefly the children of people of substance instead of those of the common people." [2]

The early part of the eighteenth century between 1700 and

"In this account we see the gradual progress of luxury at Birmingham, the houses having increased so much faster than the people."—*Ibid.*

[1] In the census returns of 1801 the rate in 1750 was calculated (from the registered burials, allowing for omissions) to have been 1 in 23; in 1811 this was corrected to 1 in 21, and in 1821 to 1 in 20. According to Farr's calculation from the Bills of Mortality the death-rate was still higher. Between 1728 and 1757 he finds the average death-rate to have been 52 per thousand. See table in McCulloch's *Account of the British Empire*, 1854, II, p. 613.

[2] *Op. cit.* p. 110.

1757 or 1765 is considered to have been one of the chief periods of working-class prosperity in this country. Food prices fell from the level of the seventeenth century, there was a great demand for labour, and wages tended to rise. The standard of living improved. Instead of bread from the coarser cereals, barley, rye and oats, fine wheaten bread, previously a luxury of the well-to-do, became the staple food of the greater part of the country. Between 1700 and 1720 London's share in this general prosperity is reflected in the Bills of Mortality. In those years the proportion of burials to baptisms is the lowest during the eighty-five years from 1680 to 1765, as that between 1740 and 1760 is the highest.[1] What was the cause of the setback after 1720?

The Bills of Mortality recorded the inevitable effects of dearth and fever in the lessening of births and increasing of deaths, but the period from 1700 to 1750 was on the whole one of plenty, while the bad years were distributed fairly equally before and after 1720.

Fever was perennial in London, and a bad harvest with a rise in the price of bread and a hard winter were inevitably followed by an epidemic. There were two such outbreaks between 1700 and 1720 and two between 1720 and 1750. A hard winter and a very long frost in 1708–9, with a bad harvest in the following summer, caused a great rise in the price of corn, and the famine price of 81*s*. 9*d*. a quarter was reached during the autumn and winter of 1709–10. Distress and fever made the recorded burials rise from 21,890 in 1709 to 24,620 in 1710. The fall in the births was slight. In 1713 the price rose to 56*s*. 11*d*.; there was a hard frost in the following winter and the Thames was frozen. This was followed by the inevitable fever epidemic. The burials rose from 21,057 in 1713 to 26,569 in 1714.

The harvests of 1727 and 1728 were bad, corn was imported, there was a fever period in London, and from 1726 to 1729 the death-rate was very high and the births declined. The dearth of 1740 to 1741 coincided with a very cold winter followed by a very hot summer.[2] The Thames was frozen, there was much

[1] Proportion of Births to Burials in London:

		Births		*Burial.*
	1680–1700	681	to	1,000
	1700–1720	721	to	1,000
	1720–1740	649	to	1,000
	1740–1760	638	to	1,000
(four years)	1761–1765	664	to	1,000

C. Smith, *Tracts on the Corn Trade*, Supplement, p. 23.

[2] Maitland, *History of London*, 1756, I, p. 621.

distress in London, and a particularly virulent outbreak of fever occurred which caused much alarm.[1] The dearth, according to Chalmers, was not comparable with the dear years of King William (1692–1699) or Queen Anne (1709–10).[2] Corn rose to 56*s*. only, but the effects were more disastrous. It was a period of trade depression shown in a marked drop in exports, and this added to the unemployment caused by the frost. The effects of these two calamitous years are seen in the terrible excess of burials over baptisms, 15,580 in 1740 and 17,212 in 1741.[3]

The fact that a high death-rate and low birth-rate should have combined between 1720 and 1750 to check the increase which had been fairly constant for many years before is strange, because during this time London was spreading itself over a wider area and the narrow streets and courts of the City were becoming less crowded as more warehouses were built.[4] It was also a time of plentiful harvests and cheap food. In the forty years between 1715 and 1755 there were only three bad seasons, 1727, 1728 and 1740, and the price of corn was very low. The dearth of 1740 was confined to a single year and was followed until 1751 with an uninterrupted succession of good and abundant seasons.[5] Meat in London was cheap and plentiful,[6] and the

[1] "The present fever (1741) on its first appearance seldom fixed itself on any but the poor people, and especially on such as lived in large towns, workhouses or prisons. Country people and farmers seemed for the most part exempt from it." It was ascribed to millers and bakers using flour composed of horse-beans, pease, coarse unsound barley, etc. "in the late scarcity and dearness of provisions." *Ibid.*

[2] *Domestic Œconomy*, 1812, p. 261.

[3]

	Baptisms	*Burials*
1740	15,231	30,811
1741	14,957	32,169
1742	13,751	27,483

[4] Cf. Defoe on the increase of London between 1725 and 1727 in the Introduction to the last volume of his *Tour*, p. 10: "Since our last volume (1725) we have to add to our description of the parts in and about London, a large variety both of publick and private buildings; as a new East India House building in the City and a South Sea Company-house finished, both lofty and magnificent. Mr. Guy's hospital in Southwark . . . the additions to Bethlehem Hospital and several new steeples and churches. . . . Then there is a little city of buildings, streets and squares added to those mentioned before at the West side of Hanover and Cavendish Squares, with the repair of two terrible fires at Wapping and Ratcliff."

[5] Tooke, *History of Prices*, I, pp. 41–3.

[6] "We have of late years greatly increased in the breeding of live stock of all kinds, and the great supply from the northern parts of England and Wales have glutted the London markets. . . . This great increase has of late supplied the London markets with meat far beyond its consumption and therefore lowered the price, so that the best or middling pieces have been sold cheap enough to be within the reach of the common people, therefore common pieces have not had so ready a vent as usual." *A proper Reply to the Scandalous Libel intituled the Trial of the Spirits*, 1736 (which had maintained that meat was cheap because spirit-drinkers did not eat meat and therefore the inferior pieces had to be buried).

markets and stalls were being increasingly well supplied with fruit and vegetables from the neighbouring market gardens. Trade was growing—apart from a setback after 1739—and the country was financially prosperous.[1] The sanitary condition of London was of course very bad, but there is no evidence that it was deteriorating—on the contrary, it must have tended to improve with the spreading out of the population. The constant fires and the rebuilding which followed them must have had on a smaller scale something of the effects of the Great Fire. The appearance of the plague at Marseilles in 1719 roused a salutary terror in England; it was the occasion of Dr. Mead's *Discourse concerning Pestilential Contagion*, written in 1720 at the request of the Government, which went through seven editions in a year. As a matter of fact the effects of an improved diet and some sanitary progress are seen in the decline since the seventeenth century in the mortality from scurvy, dysentery and intermittent fever.[2]

The only explanation seems to be that usually given by contemporaries,[3]—the orgy of spirit-drinking, which was at its worst between 1720 and 1751, due to the very cheap and very intoxicating liquors, which were retailed indiscriminately and in the most brutalising and demoralising conditions.

> "The diminution of births," wrote Corbyn Morris in 1751, "set out from the time that the consumption of these liquors by the common people became enormous. . . . As this consumption hath been continually increasing since that time, the amount of the births hath been continually diminishing. . . . Can it be necessary to add to this shocking loss . . . the sickly state of such infants as are born, who with difficulty pass through the first stages of life and live very few of them to years of manhood? . . . Enquire from the several hospitals in this city, whether any increase of patients and of what sort, are daily brought under their care? They will all declare, increasing multitudes of dropsical and consumptive people arising from the effects of spirituous liquors."[4]

[1] In 1729 a ministerial statement was made to show that Britain was in a thriving condition, the proofs being, a low rate of interest, a high rate of purchase for the funds, the enclosing and improving of land and mines, the increase in manufactures shown in the export returns, and the increase of shipping. Chalmers, *Domestic Œconomy*, 1812, p. 113.

[2] See Short, *New Observations on City, Town and Country Bills of Mortality*, 1750, p. 241.

[3] Another explanation sometimes given is that it was due to the collapse of the South Sea bubble, *e. g.* Maitland, *History of London*. II. p. 740. This for a few years interrupted the building of Cavendish Square, but it seems unlikely that it seriously affected the population between 1720 and 1750.

[4] *Op. cit.* p. 115.

A representation to the House of Commons in 1751 on the effects of spirituous liquors estimates the annual loss in London since 1740 by the premature deaths of weakly children under five, and by fewer births, as 9,323: "Other trivial reasons of this great mortality, which in some degree have always subsisted, may possibly require some abatement; but still the real grand destroyer is materially evident." [1]

Other reasons, of course, there were—among them the effects of dearth and fever in 1740 and 1741 are apparent, but it is possible that the reason why these were so calamitous in those years as compared with similar years before and since was that they were aggravated by the effects of spirit-drinking.

Distilling was comparatively a new industry in England and one which received special favours from the Government.[2] It produced a revenue, gave farmers a market for cereals, and especially spoiled wheat, at a time when prices and rents were low in spite of the bounty on exports; moreover, as distilling could be stopped in times of dearth, the food-supply was safeguarded. It was supposed to be favourable to the balance of trade, though as a matter of fact foreign spirits, even if smuggled, were too dear for general mass consumption. Large vested interests were created, and Lord Hervey said in 1743 that the great fortunes recently made were to him a convincing proof that the trade of distilling was "the most profitable of any now exercised in the kingdom except that of being broker to a prime-minister." [3]

The cheapness of British spirits caused a new demand and altered the tastes and habits of the people. After 1720 the number of gallons distilled according to the excise returns increased rapidly.[4] In 1726 the College of Physicians petitioned the House of Commons against spirituous liquors: "We have with concern observed for some years past the fatal effects of the frequent use . . . of spirituous liquors upon great numbers of both sexes, rendering them diseas'd, not fit for business, poor, a burthen to themselves and neighbours, and too often the cause of weak, feeble and distemper'd children. . . ." [5] The Grand

[1] *Considerations upon the Effects of Spirituous Liquors*, 1751. Cf. Short, *New Observations on City, Town and Country Bills of Mortality*, p. 209: "As some diseases are wearing out, so others are gathering fresh vigour and . . . are both more frequent and fatal, as convulsions (including chrysoms and infants . . .). If the cause were to be inquired into, perhaps the era would be found to commence with the parents' too general and fatal acquaintance with spirituous liquors . . ."

[2] By 2 William and Mary, sess. 2, cap. 1, 8 and 9 William III, cap. 19, s. 13, and 12 Anne, Stat. 2, cap. 3.

[3] *Parliamentary History*, XII, p. 1435.

[4] *Report of the Commissioners of Inland Revenue*, 1870, Vol. II.

[5] Munk, *Roll of the Royal College of Physicians*, II, p. 53.

Jury of Middlesex presented Geneva shops as a nuisance in 1729,[1] and the Middlesex Justices made a report to Quarter Sessions in January 1735–6 which gives an appalling picture of the state of London.[2] Acts were passed which aimed at preventing or controlling the indiscriminate retailing of spirits.[3] That of 1729 was openly evaded and was repealed on a protest from the farmers.[4] That of 1736, intended virtually to suppress the retailing of spirits, became a dead letter after a period of rioting. The Act of 1743 reversed the policy of 1736. It was an attempt to make the sale public and confine it to persons of some respectability. It reduced the consumption of spirits, but there was a setback in 1747, when distillers were allowed to retail on taking out a £5 licence. Excessive drinking again increased, and there was a general protest, in which Fielding's *Enquiry into the late Encrease of Robbers*, Hogarth's "Gin Lane," and appeals to the evidence of the Bills of Mortality[5] were an effective part. The Act of 1751 really did reduce the excesses of spirit-drinking. It may be considered as a turning-point in the social history of London in the eighteenth century, and was so considered when this time was still within living memory.[6] The effects of the Act and of the subsequent increases in the excise duty are seen in the Bills of Mortality and in the reduction in the output of spirits. This fell from the six or seven million odd gallons of the period before 1751[7] to an amount varying between one and three

[1] Maitland, *History of London*, 1756, I, p. 544.

[2] Printed in an appendix to *Distilled Spirituous Liquors the Bane of the Nation*, 1736.

[3] See S. and B. Webb, *The History of Liquor Licensing in England*, 1903.

[4] See Resolutions of a Committee of the whole House to consider further the methods for encouraging the making and exporting of home-made spirits distilled from British grain—the first being "that the Act [of 1729] . . . hath been a discouragement to the distilling of spirits from the corn of Great Britain, and therefore ought to be repealed." *Commons Journals*, XXII, p. 84, 12th March, 1732–3.

[5] E.g. *Considerations upon the Effects of Spirituous Liquors*, 1751.

[6] "The extreme misery of the lowest description of Londoners received some amelioration about 1750, thro' the commendable inquiries and remedies made and applied by the Legislation relating to their monstrous excesses in drinking ardent spirits. . . ."—Malcolm, *Anecdotes of the Manners and Customs of London . . .*, 1808, pp. 95–6.

Compare the evidence of T. Collins, a Middlesex Magistrate, before the Committee on the Police of the Metropolis, 1817, VII, p. 203: "In the early part of my life (I remember almost the time which Hogarth has pictured), when every house in St. Giles, whatever else they sold, sold gin, every chandler's shop sold gin; the situation of the people was terrible."

[7] The maximum, 8,203,430 gallons, was reached in 1743. At this time the bulk of home-distilled spirits was consumed in London; compare Lord Lonsdale in the House of Lords, 1743: "The excessive use of gin has hitherto been pretty much confined to London and Westminster."—Parliamentary History, XII, p. 1230.

million odd gallons between 1760 and 1790, in spite of the increasing population.[1]

It would hardly be possible to exaggerate the cumulatively disastrous effects of the orgy of spirit-drinking between 1720 and 1751. To appreciate what was implied by the widespread denunciation of gin-drinking, it is necessary to remember that it was entirely untouched by the spirit of the temperance reformer. Drunkenness was hardly regarded as a vice, and the consumption of strong beer was almost regarded as a British virtue. It was considered one of the evil consequences of gin-drinking that less malt-liquor was consumed.[2] The pendant to Hogarth's "Gin Lane" was "Beer Street."

The measures to check excessive spirit-drinking had been forced upon the Government in the teeth of vested interests. The movement for reform which, after this, had probably the most direct effect upon the London death-rate was that which aimed at reducing the mortality among London parish children. If, in the worst years, according to the Bills over 74 per cent. of the children born in London died before they were five, parish children, that is children kept in workhouses, or put out to nurse by the parish, died in still greater numbers. "The parish infant poor's mortality," said Hanway, "may be called 80 or 90, or if you please, upon those received under twelve months old, 99 [per cent.]."[3] Foundlings had already been provided for by the Foundling Hospital, which aimed at stopping the not uncommon practice of murdering or exposing newly-born children;[4] the Charter was granted in 1739 and the first children were admitted in 1741. About the same time the first lying-in infirmary was started, to be followed a few years later by a succession of lying-in hospitals and charities. But the movement which most directly aimed at reducing the infant mortality recorded in the Bills was that which was due almost entirely to Jonas Hanway, who, after years of investigation and agitation, succeeded in obtaining the Act of 1767 "to preserve the lives of

[1] Though presumably illicit distilling increased as the duty on spirits was raised.

[2] Cf. Tucker, *An Enquiry concerning the Use of Low-priced Spirituous Liquors*, 1751.

[3] *Letters on the Importance of the Rising Generation*, 1768, II, p. 136.

[4] Thomas Coram, the founder of the Hospital, said he had been a witness to the shocking spectacle of innocent children who had been murdered and thrown on dunghills. Pugh, *Life of Jonas Hanway*, 1787, p. 156. Defoe urged that there should be a hospital for foundlings, in London, to prevent "murder, dishonour and other abuses." *Augusta Triumphans*, 1729, p. 4. See also *Old Bailey Sessions Papers*, passim, for trials of women for murdering their illegitimate children.

the infant poor." [1] Between 1757 and 1763 Hanway visited every workhouse in London and collected and published facts and statistics. These were "so melancholy that they were generally disbelieved." [2] He also visited workhouses in the country and in provincial towns, and came to the conclusion that the greater mortality in London was due to the impurity of the air.

Hanway first obtained an Act obliging every parish to keep an annual register of infants received as a possible "means of preserving the lives of such infants." [3] Model schedules were given in the Act and minute particulars were asked for. From these registers the Company of Parish Clerks were to publish a yearly abstract. Taking the returns for the first complete year, 1763, Hanway found that in eleven parishes and unions of parishes 291 children had been received, exclusive of those "discharged" or delivered to their mothers within the year.[4] Of these 16 had been discharged in 1764 and 1765, leaving 275, of whom 256 were dead by the end of 1765. These parishes he gives as examples of the best and the worst. It is hard to discover from the list which are the "best" parishes, but they appear to be "St. John and St. Margaret's, Westminster," which out of 32 children discharged 4 and had 4 remaining alive in 1765; St. George's, Hanover Square, out of 41 children had discharged 2 and had 5 remaining alive; St. Giles and St. George, Bloomsbury, out of 50 children had discharged 1 and had 6 remaining alive. All the rest had died. In the majority of the other

[1] 7 Geo. III, cap. 39.

[2] Pugh, *op. cit.* p. 186.

[3] 2 Geo. III, cap. 22 (preamble).

[4] It is not to be supposed that many of these children lived to grow up, though their chances were certainly better than in the workhouse or boarded out with parish nurses. On one occasion Hanway remarked that a certain overseer refused to allow the mother of a new-born infant more than 1s. 6*d*. a week, and pointed out that this was less than he gave to strange nurses. "'Yes,' says the conscientious officer, 'but you don't consider that this woman will take care of her own child, and it may be on her hands a long time, whereas we shall perhaps hear no more of the other.'" Pugh, *op. cit.* p. 192. One of the reasons given for the building of workhouses in London was that children would no longer be at the mercy of parish nurses, cf. *The Case of the Parish of St. James', Westminster, as to their Poor and a Workhouse designed to be built for them*: "All the poor children now kept at parish nurses instead of being starv'd or misus'd by them, as is so much complain'd of, will be duly taken care of, and be bred up to Labour and Industry, Virtue and Religion. . . ." (See below, p. 338, for the achievement of this workhouse.) A Committee of the House of Commons reported in 1715 "that a great many poor infants and exposed bastard children are inhumanly suffered to die by the barbarity of nurses, who are a sort of people void of commiseration or religion, hir'd by the churchwardens to take off a burthen from the parish at the cheapest and easiest rates they can, and these know the manner of doing it effectually." C. J., 8th March, 1715.

parishes none of the children received in 1763, not discharged, remained alive to the end of 1765.[1] Hanway concludes from these facts "that we pay very dearly in lives by not taking proper measures to counteract the effects of living in such vast crowds."[2]

The next step was to use the material provided by the registers, which showed the appalling mortality among children in London workhouses and the much lower death-rate among those sent to the country to be nursed,[3] to force reform upon the parish authorities. Hanway's biographer, who knew him personally, describes him as "going from one workhouse to another in the morning and from one member of Parliament to another in the afternoon, for day after day and year after year, with steady and unwearied patience, enduring every rebuff, answering every objection and accommodating himself to every humour for the furtherance of this beneficial design almost without assistance."[4]

A Committee of the House of Commons was appointed in December 1766 to inquire into the state of the Parish Poor Infants. The records kept according to the Act of 1761 were referred to it and its recommendations were carried out in the Act of 1767.

This Act embodied in principle the measures already taken by the parish of St. James, Westminster, doubtless at the instigation of Hanway, and also doubtless owing to the bad record of their workhouse, which having received twelve children in 1763 had failed to rear a single one. The parish obtained a private Act in 1762 by which twenty-one gentlemen of the parish were chosen by the vestry to be Governors and Directors of the Poor. These "after much search and difficulty found several cottagers on Wimbledon Common fit and proper to be entrusted with the care of children." Five or six children were placed in a house, three shillings a week being paid by each child. A system of rewards to nurses was arranged. If a sickly child recovered, or one sent under nine months old lived a year, the nurse was paid a guinea. Ten and sixpence was given for each child surviving smallpox or inoculation, and five shillings for each child recovering from measles or whooping-cough. The health and cleanliness of the children was supervised by a local surgeon who could recommend further payments to the nurses. If two children died within a year with one nurse, she was "discontinued, as it seems to imply

[1] *Letters on the Importance of the Rising Generation*, 1768, II, p. 124.

[2] *Ibid.* II, p. 136.

[3] Cf. a letter from Hanway to the *London Chronicle*, December 13–15, 1763.

[4] Pugh, *op. cit.* pp. 191–2.

a want of skill or attention or both." The children stayed at Wimbledon till they were six or seven, and sometimes longer, and those who could walk went to school, threepence a week being allowed by the parish for their instruction in reading and sewing.[1]

St. James' was a wealthy parish and so high a scale of payments could not be imposed on all the London parishes, many of which had only paid 1*s.* or 1*s.* 6*d.* a week to their nurses. The Act of 1767 ordered that all children under six, within three weeks of their reception by the parish authorities, were to be sent not less than three miles from any part of the cities of London and Westminster, and children under two not less than five miles. Nurses were to be paid at least 2*s.* 6*d.* a week, and for children over six at least 2*s.* A reward of 10*s.* was given to nurses for rearing children sent to them under nine months old. The parish was to pay the expenses of clothing, conveyance, medicines and burials. Five Guardians of the Parish Poor Children were to be appointed in each parish.

The effect of the Act was immediate. Pugh writes, "If I were to state the number of infants whose lives appeared by the registers of the next five years to have been preserved, I should most probably be disbelieved. The poor called it the Act for keeping children alive." [2] Howlett estimated that the London burials were reduced by 2,240 in the first year, and that, allowing for the children who returned to London and died there, the annual average reduction in the London burials was 2,100.[3] This Act appears to be the only piece of eighteenth-century legislation dealing with the poor which was an unqualified success, and one of the few Acts aiming at social reform which were effectively administered.[4]

The Act was limited in its scope. A further cause of the decline in the burials in the Bills of Mortality which caused so much alarm after 1770 is the improvement in medicine and midwifery which began about the middle of the century, and was accompanied by and partly due to an extension of medical practice among the poor. The chief factors in this extension were the lying-in charities and the dispensaries.

The impulse to lying-in charities appears to have been partly

[1] *Sketch of the State of the Children of the Poor . . . St. James', Westminster.*

[2] *Op. cit.* p. 191.

[3] *Examination of Dr. Price's Essay . . .*, 1781, p. 91.

[4] Though the provision for the election of Guardians was very generally neglected. See C. J., 1st May, 1778. The Act was approved by the Commissioners of 1834, who recommended that its principles should be generally adopted.

the desire of teachers of midwifery for clinical practice for their pupils, partly the alarming disproportion between births and burials before 1750. In 1739 a lying-in infirmary on a very small scale was started by Sir Richard Manningham as a school of midwifery both for medical students and midwives.[1] In 1741 Smellie began to teach midwifery in London, and in order to give instruction to his pupils he established a scheme for attending poor women gratuitously in their homes, and made it a condition that all who attended his practical courses should contribute 6s. to a fund for the support of these women. He was the founder of scientific midwifery in England, revolutionised the instrumental side of the art, raised the status of practitioners and trained over 900 pupils exclusive of his female students. The impetus which he gave to midwifery helped in establishing a number of lying-in hospitals in London.[2] In 1747 the Middlesex Hospital made arrangements for receiving maternity patients and appointed a physician-accoucheur; in 1749 the Lying-in Hospital for Married Women, and in 1750 the City of London Lying-in Hospital were founded. Queen Charlotte's Hospital for unmarried as well as married women was opened in 1752 and the Royal Maternity Hospital in 1757. The Lying-in Charity for delivering poor married women at their own homes founded in 1757 was the first of a number of similar institutions. This charity gave a free training to midwives, who were not allowed to practise till they had obtained a certificate of proficiency from the physician of the charity. They were then pledged to work for it at low fees for two years in return for their training. The matrons of lying-in hospitals had to be skilled midwives. Before the founding of these institutions the only resource for the poor woman had been the workhouse or the attentions of those who often combined the "nursing of lying-in women" with the hawking of fish and vegetables or with other less reputable callings. "In the nurture and management of infants as well as in the treatment of lying-in women," wrote Dr. Lettson in 1774, "the reformation hath equalled that of the small-pox; by these two circumstances alone incredible numbers have been rescued from the grave."[3] "Within

[1] See Sir R. Manningham, M.D., F.R.S., *An Abstract of Midwifery for the Use of the Lying-in Infirmary*, 1744. Men paid 20 guineas for instruction, women 10. See also advertisement in the *London Evening Post*, 1-3 April, 1744: "At the said Infirmary women are perfectly taught the art and practice of midwifery, and midwives are also greatly improv'd in their knowledge by means of the machine, etc., two mornings in every week."

[2] See J. Glaister, M.D., *Dr. William Smellie and his Contemporaries*, 1894, *passim*.

[3] *Medical Memoirs*, 1774, p. 189.

the space of a few years many lying-in hospitals have been established; in the lying-in charity alone near 5,000 women are delivered annually in their own houses, by persons well instructed . . . whereby not only many infants, but likewise many women are saved.[1] The records of the Lying-in Hospital certainly showed a progressive reduction in the mortality of mothers and children. For the first ten years from 1749 to 1758 the deaths among women averaged 1 in 42, among children 1 in 15. By 1799–1800 the deaths had been reduced to 1 in 913 among women and 1 in 115 among children.[2]

The dispensary movement began in 1769. The principle of the dispensary was the establishment of a centre at which the poor might attend within certain hours for advice and free medicine, while those who could not attend were visited in their homes.[3] Creighton has pointed out that medical practice in the eighteenth century lay chiefly among the richer classes, and that physicians knew little of the state of health in cellars and tenement houses.[4] The dispensary doctors knew a great deal, and some of them published the result of their experiences.[5] Their activities

[1] *Medical Memoirs*, 1774, p. 187. The number of women delivered in the year 1774–5 was 5,428 (nearly a third of the total baptisms in the Bills of Mortality); the annual average was between 4,000 and 5,000 odd. See *Account of the Lying-in Charity*, 1820.

[2] Figures of the British Lying-in Hospital:

	Proportion of Deaths (fractions omitted) *Women*	*Children*
Nov. 23, 1749–Dec. 31, 1758	1 in 42	1 in 15
1759–1768	1 in 50	1 in 20
1769–1778	1 in 53	1 in 42
1779–1788	1 in 60	1 in 44
1789–1798	1 in 288	1 in 77
1799–1800	1 in 913	1 in 115

"This table . . . shows to what extent the lives of children may be preserved by proper attention and management."—Willan, *Diseases in London*, 1801, pp. 323–4.

[3] These dispensaries had nothing to do with three earlier dispensaries established by the College of Physicians, the first in 1696, for supplying medicines to the poor at cost price. They gave rise to an acrimonious dispute with the Apothecaries' Company and had long been given up. See Rees, *Encyclopædia*, and *A Vindication of the College of Physicians from the Reflections made upon them by the Apothecaries in Parliament* [1712?].

[4] *History of Epidemics*, 1894, II, p. 134.

[5] An interesting example of the knowledge of social conditions obtained by dispensary doctors (and of the general ignorance concerning them) is afforded by the Midwifery Reports of the Westminster General Dispensary read by Dr. Bland to the Royal Society in 1781. He had investigated and recorded the cases of 1,389 women, and discovered "how exceedingly fertile the women of the poorer classes in this country are, and at the same time how unable to rear any considerable number of children." He found the cause to be "not any natural imbecility or constitution vitiated from the birth, many of those victims being

had a double effect, the poor learned something of the rudiments of hygiene, the doctors learned to diagnose the diseases of poverty and dirt. The richer classes began to hear of the conditions under which the poor lived. As a result a new current of opinion was formed, small at first, which began to run counter to the generally accepted theory that the London poor were brutal and depraved and that their distresses were due to vice or, at the best, improvidence.[1]

The first dispensary was founded by Dr. Armstrong in Red Lion Square in 1769 "for the Relief of the Infant Poor." After improving the lot of the poor-law children the next step was to provide help for "the infants of the industrious Poor."[2] At this time very little attention had been paid to the ailments of children, rich or poor,[3] and there was great ignorance as to the most rudimentary principles of diet and treatment. A dispensary report of 1794 says: "When children are ill it is but too common an opinion, however absurd, especially among the lower class, that a physician cannot be of any use to them from their not being able to describe their complaint. Thus every old woman thinks herself as competent to prescribe as a physician."[4]

born with all the appearances of health and vigour; but . . . rather . . . the poverty of the parents." He suggests that "whether this great check to population is in its nature irremediable" is a suitable subject for experiment by an abatement in the parents' rates and taxes, and concludes that it would be useful to learn the proportion of deaths in more opulent families. *Philosophical Transactions*, LXXI, pp. 355 ff.

[1] For instance: "I have been too intimately acquainted with the condition and manners of the poor to want facts in support of what I advance. . . . Those who form their judgement from a superficial observation of a few intoxicated objects who are found in the most frequented places are much mistaken with respect to the body of the laborious poor, who humbly seclude themselves in miserable courts and alleys. . . . When I regard the distresses of the indigent, I rather admire that the instances of their misconduct should be so rare."—Lettsom, *On the Improvement of Medicine in London*, 1775, pp. 21–2.

"The contagion of bad example is generally caught by the lower from the higher orders; and I see nothing very exemplary in our own conduct to induce me to doubt but that the poor are as good, as prudent, and as industrious as we should have been in the same circumstances and under the same disadvantages." —Sir Thomas Bernard, Introduction to the *Second Report of the Society for Bettering the Conditions of the Poor*, 1798.

[2] See a letter from Sir John Fielding to the *London Chronicle*, 1770, on behalf of this dispensary. In the first eight years 20,962 children were treated, of whom 699 were known to have died. *General Account of the Dispensary for the Relief of the Infant Poor*, 1787, p. 197.

[3] See Creighton, *History of Epidemics*, II, p. 756. Dr. Cadogan wrote in 1747 that well-to-do children in general were "over cloath'd and fed, and fed and cloath'd improperly." His book was the beginning of a reform in the treatment of children.

[4] "Plan of the General Dispensary for inoculating and administering Advice and Medicines gratis to all the Infant Poor," p. 7.

The best known of the dispensaries was the General Dispensary, founded in 1770, and usually but incorrectly said to be the first.[1] Dr. Lettsom in 1775 claimed for this institution that it had contributed not a little to the decrease in burials since 1770. He says that in the two great London hospitals, St. Thomas' and St. Bartholomew's, about 600 patients, or 1 in 13 of all admitted, died annually, while in the dispensary the deaths were not 1 in 33. He also asserts that by the instructions of the physicians many lives must have been saved in every part of London that would otherwise have been sacrificed to ignorance and quackery. He writes, "In the space of a very few years I have observed a total revolution in the conduct of the common people respecting their diseased friends, they have learned that most diseases are mitigated by a free admission of air, by cleanliness and by promoting instead of restraining the indulgence and care of the sick. Such instruction was new to the poor, though important to their preservation, and when we consider how late they have acquired this information, we must lament that so many centuries have elapsed before an institution like the General Dispensary became the object of public attention." [2]

Dispensaries spread rapidly in London,[3] and were instituted in other towns. They led to measures for the cure and prevention of typhus, and at last, after a virulent outbreak in 1800 and 1801, steps were taken for the isolation of fever cases. The London House of Recovery in Gray's Inn Road, established by the Institution for the Cure and Prevention of Contagious Fever, was opened in February 1802. Before this time there had been no possibility of isolating poor patients. Typhus persisted in workhouses and in some of the hospitals where those suffering from it were not separated from the other patients. When a fever patient was taken to the hospital he went in the first hackney coach or chair that could be found. Courts and alleys where cases had occurred continued to be centres of infection. "When the fever has depopulated a building by death and terror, poverty and ignorance bring new inhabitants who sicken and die or linger

[1] *E. g.* Pettigrew, *Memoirs of Lettsom*, 1817, 1, p. 37.

[2] Lettsom, *On the Improvement of Medicine in London*, 1775, p. 51.

[3] "From the eastern extremity of Limehouse to the western of Millbank; on the north from Islington and Somers Town to the south as far as Lambeth, and by means of the Greenwich Dispensary, to Newington and Peckham, including a space of nearly 50 square miles, a system of medical relief is extended to the poor, unknown to any other part of the globe. About 50,000 poor persons are thus annually supplied with medicine and advice gratis; one-third of whom, at least, are attended at their own habitations."—Feltham, *Picture of London*, 1802, p. 167.

and relapse, and after being carried to the workhouse or the grave leave the same pestilential apartment to their ill-fated successors. From these pest-houses concentrated contagion pours into the adjacent courts and alleys . . . it is disseminated through the neighbourhood by the frequent intercourse of the needy, who repeat . . . their visits in endeavours to supply each daily want, who are frequently reduced to beg, borrow or pawn one article to enable them to buy another. . . . Through a medium of pawn-brokers, old-clothes men, rag-shops, and by contact in a variety of ways the poison is communicated where least suspected." [1]

The "fever" which was perennial in London with occasional epidemics, seems first to have been identified with jail fever by Dr. John Hunter in 1779. He found it to be the result of poverty, overcrowding and dirt.[2] Dispensary doctors soon became familiar with it, and some of them lost their lives from it.[3] When the House of Recovery was opened a Committee was appointed to organise the cleansing of infected houses by whitewashing with hot lime,[4] and printed instructions were circulated. Fever cases were admitted immediately without waiting for a subscriber's letter and the approval of the weekly board, as was general in other hospitals.[5] To avoid infecting hackney coaches, patients were removed in a litter with a detachable linen lining (this was mobbed when it first appeared).

The Committee soon discovered that there were places where the infection had continued for many years, and they offered to whitewash and cleanse those parts of London which were particularly subject to infectious fever.[6] The effects were so marked and immediate that the Churchwardens, Overseers and Vestry

[1] C. Stanger, M.D., *Remarks on the Necessity and Means of suppressing Contagious Fever in the Metropolis*, 1802, p. 19.

[2] Creighton, *op. cit.* II, p. 138.

[3] Stanger, *op. cit.* p. 18 n.

[4] The antiseptic properties of quick-lime slacked in boiling water was a discovery of Howard made on his cottages in Bedfordshire and applied by him to prisons. *Lazarettos*, p. 118.

[5] Cf. "There are but few of the sick, as far as I have been able to learn (1779), that find their way into the great hospitals in London, which probably is to be imputed to there being but one day a week alloted for the admission of patients. Before a recommendation can be procured and the stated day come round, the sick person is either better or so much worse that he cannot be moved, or is perhaps dead. They are carried, however, in great numbers to parish workhouses, in which it frequently happens during the cold months, that the fever becomes as violent and proves as fatal as in the most crowded jails, hospitals or transports." —Dr. John Hunter, "Observations on Jail and Hospital Fever," *Medical Transactions of the College of Physicians*.

[6] *History of the London House of Recovery*, 1817, p. 11.

of St. Clement Danes voted twenty guineas to the Institution, and recommended their successors to make a liberal annual donation.[1] Churchwardens and Overseers were so averse from spending money except on fighting settlement cases, on tavern festivities and on mutual jobs, that this must be considered a very remarkable tribute. In May 1804 the Institution was given a parliamentary grant of £3,000 on condition of raising an additional sum by subscription, and with this it was able to buy one of the two smallpox hospitals in Pancras Road,[2]—a large building in which it was possible to set aside a part for scarlet fever.

The result of these measures was seen in a sudden drop in the number of fever cases, partly, of course, due to the subsiding of the epidemic of 1800–1801. While the annual average mortality from fever in the eighteenth century had been 3,188, the deaths for 1802 were 2,201, and by 1815 had been reduced to 1,033. The number of fever patients at the Carey Street Dispensary, which had previously averaged 250 a year, was only 4 in 1804.[3]

There had also been a great reduction in the mortality of the disease. One in four of those attacked had died before the House of Recovery had been opened. During the first nine years of its existence 785 patients had been admitted, 696 of whom had been cured, a mortality of less than 1 in 9, although some of the patients were "sinking under the fatal effects of dram-drinking."[4]

The experiences of the doctors of the Institution for the Cure and Prevention of Contagious Fever taught them the possibility of stamping out typhus by sanitary reform. They received certificates of health from the infected districts where they carried out measures of disinfection. Though no fundamental reforms were attempted till after the epidemics of cholera many years later, the comprehensive measures urged by Dr. Stanger, one of the doctors of the Institution, are a remarkable anticipation of future policy. These included the widening of lanes and alleys and the opening and enlarging of courts, yards

[1] *State of the Institution for the Cure and Prevention of Infectious Fever*, 1803.

[2] One of these hospitals had been used for inoculation cases and became unnecessary when vaccination was introduced.

[3] Something of this was due to the fact that the period from 1802 to 1815 was a healthy one in London. Bateman, recording in 1816 the cases of the Carey Street Dispensary, wrote, "'The extraordinary disappearance of contagious fever from every part of this crowded metropolis cannot fail to have attracted the attention of the reader.' He concluded, not without reason, that the immunity of London from fever was due to the high degree of well-being among the poorer classes in years of plenty."—Creighton, *op. cit.* II, pp. 103–4.

[4] *History of the London House of Recovery*, 1817.

and areas, the proportioning of the space to the number of persons employed in manufactories, maintained in workhouses, poor-houses, hospitals and public charities, or confined in prisons—to be enforced by inspection. He suggested that the inhabiting of cellars should be regulated if not prohibited, that there should be an abundant water supply, and that public baths should be provided, that the labouring classes should be exempted from the window tax. As these measures could not be effected without interfering with private property and domestic economy, he urged that they should be enforced by compulsory legislation.[1] Bateman made similar proposals.

The changes in the Bills of Mortality during the century were revolutionary. For the first fifty years the burials were to the christenings roughly as three to two (for the three years from 1740 to 1742 they were more than double the christenings). From 1750 the average proportion of burials to christenings grew steadily less, though in years of special distress—of high prices or bad trade—the burials increased and christenings declined.[2] In 1790 for the first time the christenings exceeded the burials. The dearth of 1795 caused a sudden rise in the burials and a drop in the christenings, but in spite of this, for the five years from 1795 to 1799 the christenings and burials were virtually equal (the average annual excess of the latter was 9). Again the effects of the bad season of 1800 followed by a fever epidemic are seen in an increase of about 5,000 in the burials over those of the preceding years, and in 1801 there was a marked drop in the baptisms. Nevertheless for the five years from 1800 to 1804 the average number of baptisms exceeded that of the burials and the excess grew steadily.

The decrease in burials was greatest among children. For the twenty years from 1730 to 1749 the burials of children under five were 74·5 of all the children christened. From 1750 to 1769

[1] C. Stanger, M.D., *Remarks on the Necessity and Means of suppressing Contagious Fever in the Metropolis*, pp. 25–6. See also Bateman. *Reports on the Diseases of London*, 1819.

[2] See table of population of England and Wales and price of wheat 1780–1810 in Milne's *Annuities and Assurances*, 1815, II, p. 563. "It will be observed that any material reduction in the price of wheat is almost always accompanied by an increase both of the marriages and conceptions, and by a decrease in the number of burials. . . . Also that any material rise in the price is generally attended by a corresponding decrease in the marriages and conceptions and by an increase in burials. *Ibid.* p. 390. See also Rickman's *Preliminary Observations to the Census Returns of* 1811, p. xxv, and table by Farr in the *Journal of the Statistical Society*, IX, p. 168, comparing the average price of wheat with the burials from the London Bills of Mortality (though this table is based on ten-year averages, and does not show the effect of sudden fluctuations of price).

this proportion was reduced to 63 per cent., from 1770 to 1789 to 51·5 per cent., and from 1790 to 1809 to 41·3 per cent.[1] Heberden remarks in 1808, "If we reflect on the swathing and diet, the confinement and dirt in which the children of the poor used till lately to be brought up, we shall cease to be surprised at this effect." [2]

The causes of this improvement in the health of London which have been considered in this paper have been mainly those which were due to conscious effort. There were, of course, many others. Contemporary observers lay stress on the less crowded manner of living, the great improvement in the streets of London with the succession of paving Acts beginning in 1762, the taking down of the street signs and obstructions which impeded the circulation of air, the greater attention of scavengers and the influence of improved agriculture in creating a demand for the mud and filth of the streets as manure. The better drainage of London and the increased supply of water and fuel were much commented on.[3] Excessive drinking declined. The increasing consumption of tea and sugar as the century went on was, in spite of moralists, sometimes admitted to be beneficial.[4] The cow-keepers round

[1] See Macculloch, *Account of the British Empire*, 4th ed., II, p. 543.

[2] "On the Mortality of London," *Medical Transactions of the College of Physicians*, IV, p. 105. Cf. the Starkey paper in Hone's *Everyday Book*.

[3] See, for instance, Wales, *Inquiry into the present State of the Population in England and Wales*, 1781; Wm. Black, M.D., *Observations on the Small-pox*: 1781; W. Heberden, *On the Mortality of London*, 1808; F. Bateman, *Reports on the Diseases of London*, 1819; Gilbert Blane, *Select Dissertations*, 1833. Cf. also, W. Heberden, "Some Observations on the Scurvy" (1807). *Medical Transactions of the Royal College of Physicians*, IV, p. 70: "Anybody who will be at the pains to compare the conditions of London and all the great towns in England during the seventeenth century with their actual state, and note the corresponding changes which have taken place in diseases, can hardly fail to consider cleanliness and ventilation as the principal agents in producing this reform. And to this may be added . . . the increased use of fresh provisions and the introduction of a variety of vegetables among the ranks of the people. The same spirit of improvement which has constructed our sewers and widened our streets and removed the nuisances with which they abounded, and dispersed the inhabitants over a larger surface and taught them to love airy apartments and frequent changes of linen, has spread itself likewise into the country, where it has drained the marshes, cultivated the wastes, enclosed the commons, enlarged the farm-houses and embellished the cottages. I believe few, even of physicians, are aware of the extensive influence of these measures. Few have adverted with the attention it deserves to the prodigious mortality occasioned formerly by annual returns of epidemical fevers, of bowel complaints and other consequences of poor and sordid living to which we are entire strangers."

[4] "Tea is an article universally grateful to the British population and has to a certain extent supplanted intoxicating liquors in all ranks, to the great advantage of society. . . . The modern use of tea has probably contributed to the extended longevity of the inhabitants of this country."—Blane, *Select Dissertations*, I, p. 55. See also Rickman's correspondence with Sir F. d'Ivernois, in 1827: "It is not for Mr. Rickman to assign causes of the decrease of mortality;

London had developed a system for the winter feeding of cows which ensured a plentiful supply of milk throughout the year, though it was much adulterated by the retailers.[1] Greater cleanliness was encouraged by the development of the cotton manufacture. The linen stays, quilted petticoats and linsey-woolsey garments which had been worn by the poor till they dropped to pieces from dirt were replaced by cotton garments.[2]

The record of the causes of death in the Bills of Mortality,[3] unscientific though it was,[4] reflects the social history of the period. Intermittent fever was a prevalent and fatal disease in London between 1661 and 1665; for some years after the Great Fire it was very rare, but was epidemic from 1677 to 1685 and prevailed a good deal in the early part of the century. With improvements in the draining and paving of London it was greatly reduced, and Dr. Blane (who was physician to the London Hospital from 1783 to 1795) found that it occurred chiefly among labourers from marshy districts—especially Kent and Essex.[5] Scurvy declined at the end of the seventeenth century, and during the eighteenth vanished as a cause of death.[6] This is ascribed to the agricultural

if he might venture further than in the preliminary observations (to the census of 1811 and 1821) . . . he would ascribe it to the general use of tea and sugar, and to the increased operation of the Poor Relief laws which ensure wholesome food and medical attendance to all. But these arguments would encounter contradiction in England. . . ." *Minutes of Evidence before the Population Bill Committee of the House of Commons*, 1830.

[1] Foot, *General View of the Agriculture of Middlesex*, 1794, p. 80 ff., and Baird, 1793, idem, p. 12 ff.

[2] Francis Place, Add. MSS. 27,827 fo. : "It was found to be less expensive to wear cotton goods . . . and as it was necessary to wash these, cleanliness followed almost as a matter of course. It was impossible that the women should improve in this particular without producing a very beneficial effect upon the men. . . ."

Cf. a letter of Southey to Rickman, 21st November, 1827 : "My reflections have led me to a conviction that the increase of poor rates took place from an increase of kindly feelings towards the lower classes which operated early in your lifetime and mine, upon magistrates first, who were disposing of other people's money. Since that time the same feeling has operated more extensively, and an imperceptible reliance on this has caused undue increase of population. We cannot make the poor more comfortable without making them increase and multiply."—Williams, *Life and Letters of Rickman*, 1912, p. 257.

[3] See Table by Farr in Macculloch's *Account of the British Empire*, 4th ed., II. p. 613, and also a table in Milne's *Annuities and Assurances*, 1815, II, p. 472.

[4] The "searchers" who certified the cause of death were "women advanced in years and indigent in circumstances," Hawes, *Observations on the General Bills of Mortality*, 1783.

[5] *On the Comparative Mortality of Different Diseases in London.*

[6] *Ibid.* See also, Bateman, *op. cit.* 1819; William Heberden, Jun., "Some Observations on the Scurvy," 1807, "On the Mortality of London," 1808, both in *Medical Transactions of the Royal College of Physicians*, IV.

changes which had provided winter fodder for cattle—and so prevented the necessity of killing and salting meat for the winter —and to the plentiful supply of fresh vegetables.[1] The diminution of deaths from dysentery since the beginning of the century had been great and progressive. Heberden wrote in 1801, "The cause of so great an alteration in the health of the people of England (for it is not confined to the Metropolis) I have no hesitation in ascribing to the improvements which have gradually taken place . . . in the manner of living throughout the kingdom, particularly with regard to cleanliness and ventilation."[2] The annual average of deaths from fever or typhus declined after 1770. Rickets declined steadily. This is ascribed to improvement in ventilation and cleanliness and to "more maternal attention to the suckling and rearing of children."[3]

The diseases of infants recorded under the head of "convulsions and chrysoms" (and many such deaths must have escaped registration) were at their worst between 1728 and 1757. "In and about London a prodigious number of children are cruelly murdered unchristened by those infernals called nurses," wrote a controversialist on the population question in 1757. "These infernal monsters throw a spoonful of gin, spirits of wine or Hungary water down a child's throat, which instantly strangles the babe. When the searchers come to inspect the body, and enquire what distemper caused the death, it is answered, 'convulsions.' This occasions the articles of convulsions in the Bills so much to exceed all others."[4] Between 1718 and 1751 the deaths from dropsy were "one-tenth greater than at any period

[1] In 1758 Tucker wrote: "The price of green vegetables is prodigiously sunk to what it was in former times, and I much question whether any town of note in Scotland can now vie with the common markets of London in that respect. Certain it is that . . . about 100 years ago a cabbage would have cost threepence in London which at present may be bought for an halfpenny. . . . The common articles of pease and beans, sallads, onions, carrots, parsnips and turnips are considerably cheaper than ever they were known to be in former times, tho' the rent of garden grounds and the wages of journeymen gardeners are a great deal higher."—*Four Tracts*, 1774, pp. 28–9.

W. Homer, in *The Old Englishman's Letters for the Poor of Old England*, 1758, writing of London conditions says: "that great help to the poor, potatoes, having been this winter double the price they used to be."

[2] *Observations on the Increase and Decrease of Certain Diseases*, 1801, p. 35.

[3] W. Black, M.D., *Observations on the Small-pox*, 1781, p. 170. He gives the following figures of total deaths from rickets during periods of fifteen years:

1701–16	3,916
1727–42	1,171
1743–58	292
1758–73	118

[4] Geo. Burrington, *An Answer to Dr. Wm. Brackenridge's Letter*, p. 23.

before or since."[1] Deaths recorded under the heads of "apoplexy, palsy and suddenly" gradually and constantly increased, and about doubled in the course of the century (the increase must be discounted to the extent of the growth in population). Dr. Black's explanation is, "Probably the mechanical arts where either lead or quicksilver are employed may have some share in the rise of the paralytic diseases."[2] Smallpox increased in London after 1770, it is said, because inoculation, though a protection to the inoculated, spread the infection owing to ineffective isolation.[3] After the introduction of vaccination it rapidly decreased.[4]

The improvement is the more surprising because it happened in spite of the general rise in prices and during a period when bad seasons were frequent. Between 1763 and 1773 there was a check in the development of foreign trade, high prices were acutely felt, and there was much distress in London. The seasons from 1782 to 1784 were bad, that of 1789 was worse, 1792–3 was a time of trade crisis and opens a period of yet higher prices.

There are doubtless other causes for the rapid increase in the population besides the decline in the death-rate, presumably the change in the administration of the poor law and the demand for child labour, possibly the breakdown of apprenticeship, all tending to earlier marriages.[5] In so far as London is concerned

[1] Heberden, *op. cit.* p. 37. [2] *Observations on the Smallpox*, p. 170.

[3] Heberden, *op. cit.* pp. 35–6.

[4] Howlett states that inoculation in provincial towns and villages had the opposite effect: "When an epidemic appears inoculation takes place at once. . . . Where two or three hundred used to be buried in a few months, now perhaps not more than twenty or thirty."—*Examination of Dr. Price's Essay*, 1781, p. 94.

[5] It is not clear, however, that this was the case. The following figures are given by Dr. Bisset Hawkins in *Elements of Medical Statistics*, 1829, p. 27.

Annual proportion of marriages to population:

1801	1 to 123
1811	1 to 126
1821	1 to 131

Annual proportion of births to population:

1801	1 to 34·8
1811	1 to 35·3
1821	1 to 36·58

The proportion of registered burials to the population of England and Wales was calculated by Rickman to be:

in	1780	1 in 41·42
„	1785	1 in 41·75
„	1790	1 in 45·18
„	1800	1 in 47·75
„	1810	1 in 53·78
„	1820	1 in 58·50

(but on the average of the ten years before 1820, 1 in 60·65). Population Bill Committee, 1830, *Minutes of Evidence*, 1830, IV, pp. 733 ff.

the suggestion that the increase was due to a decline in the standard of life will not bear examination.[1] Drink, ignorance and dirt were positive checks on the population whose effects progressively diminished. The results of these changes were cumulative, they imply a corresponding improvement in manners and morals which in its turn reacted upon the health of the people.

The extent of this improvement has been obscured, first by writers at the end of the eighteenth century—Colquhoun being the most prominent—who maintained that manners and morals were progressively deteriorating, and imaginatively assumed that a state of unspoiled simplicity had prevailed in the early part of the century. (This school assumed as axiomatic the two theories of depopulation and the devastating progress of luxury which had accompanied estimates of the declining population.[2]) This attitude, though unhistorical, is in itself evidence of a growing sense of public decency and also of an increased knowledge of social conditions. Petty had summarily classified the poor as "the vile and brutish part of mankind." Colquhoun and the writers of his day, who were most conscious of the shortcomings of the poor, did not ascribe them to original sin, but to defects in the laws and the police.

Later writers find a mass of evidence that at the end of the eighteenth and beginning of the nineteenth century the state of things was deplorable, and sometimes fail to realise that earlier in the century worse conditions were acquiesced in as inevitable and were little spoken of. They sometimes assume that social progress was inconsistent with political reaction.

Francis Place, who was a systematic collector of facts relating to social conditions, more especially in London, was unwearied in maintaining that the progressive decline of the death-rate, and especially of the death-rate among young persons, was evidence of the widespread improvement which he himself had witnessed. He wrote in 1822:

[1] Cf. D. Heron, *On the Relation of Fertility in Man to Social Status, and on the Changes in this Relation that have taken place during the last Fifty Years*, 1906. This shows that while in London in 1901 a high birth-rate was correlated with general pauperism and bad environment, in 1851 the correlation was less by nearly 100 per cent. In the earlier period the excess of births in working-class districts was easily to be accounted for by earlier marriages, and, moreover, where the wives had many children, the infantile death-rate was lowest.

[2] The depopulation theory persisted in spite of much opposition till the end of the century. For instance, a letter in the *Monthly Magazine* (p. 7) of 1796 runs: "The manufactories of Lancashire, Warwickshire and Yorkshire may probably have increased the number of inhabitants in some parts of those counties, but if the whole kingdom be taken into account it will be impossible to deny the very alarming progress of depopulation among us."

"By the summary of the baptisms and burials appended to the Population Returns it appears that the mortality of the metropolis in 1700 was 1 in 25, in 1750 as 1 in 21,[1] in 1801 and the four preceding years as 1 in 35, and from that period 1 in 38. Much of this is attributable to the increased salubrity of the Metropolis, much to the increase of surgical or medical knowledge, much also to the change that has taken place, not only in London but all over the country, in the habits of the working classes, who are infinitely more moral and more sober, more cleanly in their persons and their dwellings, than they were formerly, particularly the women, partly from the success of the cotton manufacture which has enabled them to discard the woollen clothes which were universally worn by them, which lasted for years and were seldom if ever washed; partly from increased knowledge of domestic concerns and general management of children. Notwithstanding the vice, the misery and the disease which still abounds in London, its general prevalence has been greatly diminished."[2]

M. DOROTHY GEORGE

[1] Rickman in 1821 corrected this estimate to 1 in 20, on the ground that he had before underestimated the omissions in the Register of Burials. In 1821 it was 1 in 40. The calculation is made from the parish registers, not from the Bills of Mortality. See *Population Returns of* 1821, p. 160.

[2] *Principles of Population*, 1822, pp. 252–3.

REVIEWS

Wealth and Taxable Capacity. By SIR JOSIAH STAMP, K.B.E., D.Sc. (London: P. S. King & Son. 1922. Pp. 195. 8vo. 10*s.* 6*d.* net.)

IT was a wise precept of Giffen that before we draw conclusions from official statistics we should try to discover how they are arrived at, should get hold of the circulars, forms, or tables used by the compilers, master the notes, definitions and instructions by which they were guided, notice any pitfalls, loopholes for omissions and evasions, and look out for any changes of law or practice during the period covered which may affect the figures. Revenue statistics in particular may be influenced by departmental decisions as to the working and interpretation of the Acts, which have all the force of bye-laws unless and until they are set aside by Parliament or the judges. The outsider is seldom able to use all these safeguards. Sir Josiah Stamp has had exceptional opportunities of discovering the inwardness of such statistics and has made exceptionally good and able use of his opportunities. He interprets them with such high authority that it is a perilous task to attack his conclusions upon this chosen ground. The fate of the critic who is not only floored but stamped upon in this volume is not precisely an example *pour encourager les autres*.

The book is a reprint of the Newmarch Lectures delivered in February 1921. The Lectures discharge a useful function. The audience is not usually very large or well-instructed in economics and statistics, possibly because there is no fee for attendance, but a larger and more critical public is reached by publication.

The topics here dealt with are of great interest and importance: the National Capital and Income, the Distribution of Capital and Income, the Limits of Taxable Capacity, and the Effect of changing Price Levels upon Profits and Wages and on the burden of the Public Debt. The reasoning is close and subtle, sometimes perhaps a little over-subtle, but the phrasing is not always so precise as might have been expected from so clear a thinker. The opening lecture on National Capital enlarges upon National Wealth, but does not explain the distinction

between Capital and Wealth. Repeated references are made to "national wealth or income." "The amount of individual income or wealth which is available for State purposes without reducing the individual to a state of starvation or of universal ca'canny—in other words, what we now call 'the limit of taxable capacity'" is another example of language likely to induce a popular audience into confused thought. The expert reader always knows what Sir Josiah means, but the unilluminated will be puzzled by what he says. As we see in the field of politics, a popular audience is a magnet which attracts loose and popular expression against which the man of science needs to be on his guard.

The charge of over-subtlety is one which many writers would be proud to incur. Quoting from one of his previous works the author says:

"It is obvious that if a ring of people like to call their services any given 'value' there is no real obstacle. A., the great surgeon, performs an operation for B., the prima donna; B. goes to sing at a social function for C., the leading barrister; C. takes a brief for A. in a lawsuit. Each one is in the habit of selling the particular service to the community at £100, but on this occasion each sends in a bill for £1000, which is paid, and up goes the national income by £2700 above its true figure upon any reasonable exchange basis."

A very real obstacle to calling our services any given "value" is the difficulty of getting others to accept our valuation. The example chosen is unreal. The great surgeon is not "in the habit" of charging a uniform fee. He probably performs many hospital operations without fee. The means of the sufferer are one of the factors on which his fee is based, and if he is able to extract from the prima donna £1000 for a service which he is in the habit of selling for £100 to persons equally well able to pay, it by no means follows that his annual taxable income is increased by £900. Just as Dogberry vaunted himself as "one that has had losses," the prima donna will whisper to her friends the shocking fact that her operation cost her a four-figure fee, and the surgeon may find his services no longer in demand among wealthy clients. At the end of the year he may find his total income lower and not higher. The long-period view must be taken. Upon the estimates of National Capital and Wealth we have nothing but praise for the careful sifting and analysis offered. The conclusion as to taxable capacity appears, however, to be too mechanical to serve as a practicable guide in

public finance. If the prima donna were being bled and a pallor spread over her features it would be time to stop, irrespective of the number of milligrammes of blood taken. When a community is so heavily taxed that capital has to be sold or money borrowed to meet the taxes, when prices of taxed commodities are so high that there is a great decrease in their consumption, when costs of production are forced up to a point at which exports cannot be sold, unemployment exists on an unexampled scale, and arrears of taxes reach a colossal figure, we have sufficient objective proof that we are passing the limit of what the taxpayer can afford to pay to Government. The great American jurist who laid down that the power to tax is a power to destroy had in mind the power of the legislator to put a tax law on the statute book; but the power to collect the tax is another matter. The weapon may break in your hand. We are still democratic enough to compel the Chancellor of the Exchequer to have regard to the feelings of the taxpayers. The psychical limit is reached so long before the starvation limit that the nicely calculated limit of the last penny we can afford is the localisation of a dangerous spot whose position is disclosed to the prudent navigator by unmistakable signs long before he approaches it.

HENRY HIGGS

The Trade Cycle: An Account of the Causes Producing Rhythmical Changes in the Activity of Business. By F. LAVINGTON. (London: P. S. King & Son. 1922. Pp. 113.)

IT is tolerably obvious that if there existed more foresight among mankind, the alternation of ordinary booms and depressions would be deprived of some of its violence. If more people recognised that a boom was a temporary phenomenon, there would be less readiness to buy and more readiness to sell, and consequently prices would be lower; if more people recognised that a depression was temporary there would be more readiness to buy and less readiness to sell, and consequently prices would be higher. Chancellors of the Exchequer have some inkling of this when they try Couéism in a depression, declaring fervently that things are looking up; on rarer occasions they apply the equally wholesome converse of Couéism by warning the public that things are not as good as they seem. They do well, and so do level-headed business men who make money by quietly selling at the top and buying at the bottom. So also does the

humdrum or normal lecturer on economics who explains to his students that a great part, sometimes probably almost the whole of the rise of prices in a boom and of the fall of prices in a depression is the result of miscalculation in the sense of over-estimation of the prices which can be advantageously paid during the boom and under-estimation of those which can be paid during the depression. Students who have attended to his teaching will be more likely to join the ranks of the more level-headed business men and politicians, and thus to help to moderate the fluctuations of the future.

One who has grasped the great importance of this aspect of the question is likely to turn with distaste from the search for ultimate causes of the fluctuation. The fisherman can pull his boat up on the shore just out of reach of the tide without any knowledge of the cause which set the Moon revolving round the Earth or the Earth turning on its axis. What matters if it was a sunspot or some other trifling celestial or terrestrial disturbance that started the trade fluctuation? The effect would only be trifling if it were not for miscalculation; let us get rid of miscalculation and never mind about the original causes, which we probably cannot alter even if we knew them!

This was probably Mr. Lavington's attitude before the war, and it was then a very good attitude. It would be still a reasonable attitude if he was writing for all time with no particular reference to the facts of the present moment. But to adopt it as he does, specially in reference to the present situation of the commercial world, seems singularly inappropriate. It is much as if, on finding a number of persons in the various stages which follow the consumption of an excessive quantity of intoxicating liquor, we were to explain blandly that the effects would not be nearly so serious if they would only resist the feelings first of hilarity and subsequently of depression which they experience. Just now it happens that instead of a world-wide boom or depression difficult to account for with certainty just because we cannot test theory by comparison of many examples, we have some countries displaying the usual characteristics of boom and others displaying those of depression. The original cause is made obvious, and it is so enormously powerful that there is no need in dealing with it to insist on the manner in which the effects of obscure and trifling original causes are in the habit of giving rise to miscalculations so that molehills become mountains. It was not the "over-confidence" of business men which caused the immense rise of prices during the

war but the fact that belligerent governments all undertook to buy amounts of goods and services prodigiously in excess of what they usually bought. If they had first or simultaneously diminished (by taxation or borrowing) the amount of money which their subjects could lay out in purchases, this would have made no difference to prices; as they did very little in this direction, prices rose, as in any other case of additional buying. If governments had been like private persons or institutions who have undertaken to buy more than they can pay for, they would then have gone bankrupt, and the boom would have collapsed with the sale of the bankrupts' stock. Being unlike private persons, they were able to disguise their real failure to pay what they had promised by dealing out additional legal tender units of account which they printed or allowed their banks to print for the purpose. The discovery or re-discovery and utilisation of this fresh and apparently limitless source of purchasing power relieved the governments and the institutions immediately dependent on them of all fear of shortage of cash: an all-round orgie of spending took place, and promises to pay "pounds" or "marks" were legally met by paying in pounds and marks which were always worth less when they were paid than when they were promised.

In spite of popular ignorance and a good deal of gross and inexcusable blindness on the part of the "better-instructed," some governments have seen that this new-found El Dorado could not endure for ever. So long indeed as the legal tender possesses any purchasing power at all, the talk of its not being "worth the paper it is printed on" is rather foolish: a million one-rouble notes would certainly not be worth printing, but the ten-million note costs no more to print than a one-rouble note and is worth nearly as much as a Bradbury; if that is not enough it is easy to print "M" for milliard. But sooner or later there comes an end, and appreciation of the fact has caused the stoppage of further issues in some countries: in others the increase still goes on. Those in which it was stopped were promptly smitten with the dislocation which comes from a cessation of a continuous rise of prices, and those in which it has continued are simply going on as before, enjoying, though scarcely rejoicing in, the boom.

Yet Mr. Lavington begins his book with an introductory chapter which is directed towards convincing his readers that "the main causes of our present condition are to be found not in the outstanding events of the past seven years, but in the

more normal operation of the influences which produce business cycles," and that too although our condition of depression is "without parallel in business memories."

This doctrine is made all the more surprising by the fact that Mr. Lavington admits (p. 67) that an ordinary boom is eventually checked by shortage of legal tender, and that this would not happen if bank reserves "were replenished by the continuous manufacture of new legal tender money." "In actual fact," he says, "of course, the supply of legal tender is usually limited. In pre-war days in this country it was limited by the available quantity of gold; in post-war days it is limited by the restriction upon the fiduciary issue of Treasury notes." True enough, but is the intervening period of six years from August 1914 till the Cunliffe curb became effective in the summer of 1920 to be ignored? Is it nothing that during that period neither of the restrictions was in force and the amount of legal tender was in fact expanded to two or three times its former size? On pp. 10 and 11 Mr. Lavington argues that the war cannot be responsible for the depression, because we were booming till the spring of 1920 and "the transition from a period of extreme activity to one of unexampled depression" at that date cannot be explained by "circumstances due to the war." But if one of the circumstances due to the war was the removal of the ordinary check to booms and this check remained off till the spring of 1920 and then was reimposed, the abrupt transition from the great and long-continued war-boom to the depression, which every economist worthy of the name had always foreseen and foretold, scarcely needs a search for "more obscure influences."

Divested of its topical part and definitely taken to apply to a state of things in which currency is stable, the book is attractive and sound, and after all, the very term "trade cycle" seems to imply a kind of regularity incompatible with the introduction of the apparently lawless passions which bring about Great Wars and their disastrous consequences. One or two suggestions may be hazarded. In dealing with the fact that constructional industry is the most liable to fluctuation, Mr. Lavington might consider the relation of this to variations in the total amount of savings or new capital coming forward. Savings being mostly invested in constructions, it seems difficult not to believe that variations in their amount must effect constructional employment, and the question arises, how are savings affected in the progress of a cycle? If they are greater

in the whole of a boom than in the whole of a depression, it does not follow that there may not be an important change as the boom or the depression proceed. For the prevention of the violence of fluctuation it is no doubt right and useful to recommend quicker adjustment of wages upwards as well as downwards, but is it much use to bring out once more the old proposal that local and national authorities should throw their weight into the scales in opposition to the prevailing sentiment—that they should employ fewer persons in time of boom and more in time of depression? Does not the proposal require that these authorities should be more level-headed and foreseeing than private persons and institutions, whereas the observed fact is that they are less so? Representing the majority, they are likely to launch out further in time of boom and draw in further during depression than the whole mass of business men which contains a number who can act and do act in prudent disregard of prevailing sentiment. And finally, is it not rather a mistake to omit the stock comparison of the comparative advantages of the boom and the depression? Without this the reader will be apt to remain in the usual belief of the vulgar that the boom's the thing to pray for rather than the elusive normal, which never exists except at a point of time with neither parts nor magnitude as the depression passes into boom and *vice versâ*. Yet though the position of the unemployed is unpleasant, there seems little doubt that in depression the whole mass seems not only more industrious but also more contented and happy than in boom. Whether this is because it is really better off or only because the position of the employed, though absolutely worse, is better in comparison with that of the employers, is one of those interesting subjects of economic speculation to which no very certain answer can be given.

EDWIN CANNAN

Reparations, Trade and Foreign Exchange. By L. L. B. ANGAS, M.A. (London: P. S. King & Son. Pp. 351.)

THIS book is in the main a demonstration of the unwisdom of extracting from Germany a war indemnity on the scale and by the methods contemplated in the London ultimatum of May 1921; but it comprises also an interesting exposition of the present-day theory and practice of the foreign exchanges, and some suggestive remarks on the origin and course of business cycles. Mr. Angas gives us much rigorous thought and vigorous

writing, and if he seems a little dogmatic in his predictions of disaster and a little extravagant in his estimate of the effects of German "exchange-dumping," he might fairly reply that we are not yet out of the wood, and that if we emerge it will be because the world has become converted to his way of thinking.

Mr. Angas eschews the fallacy that the receipt of a present is necessarily a calamity, and bases his argument on solid foundations—the predominantly competitive character of British and German industry, the disastrous effect of upsetting the already precarious balance between different branches of production, and the fatal ease with which, through the medium both of direct demand and of the banking system, disorganisation spreads from the trades immediately affected through the whole industrial body. It is, however, difficult to feel sure that his constructive proposals altogether escape his own criticisms. These proposals are to the effect that Germany should provide free enormous works of capital development in the overseas countries, thereby ultimately cheapening the supply of food and raw materials and developing new markets both for her own consumable manufactures and for ours. But it is surely just in this very manufacture and export of capital goods that the relations between England and Germany are most pronouncedly competitive; and the history of the recent slump suggests that the ill-balanced production of *agricultural* no less than of *manufactured* goods may give rise to industrial depression. Mr. Angas's proposals, however, are hedged round with various safeguards which may commend them to those who still think that such devices are worth the candle.

It is difficult to accept some of the views expressed in this candid and thoughtful book—for instance, that the velocity of circulation of money does not help to determine the price-level (p. 288), or that Germany could provide in twenty years an export surplus of a present value (at present prices) of £20,000,000,000. (p. 261).

D. H. ROBERTSON

Is Germany Prosperous? By SIR HENRY PENSON, K.B.E. (London: Arnold. 1922. Pp. 124.)

PERPLEXED, like many others, by the conflicting reports of special correspondents, the former Chairman of the War Trade Intelligence Department visited Coblenz, Wiesbaden, Mainz,

Frankfort, and Cologne last January in order to find out for himself what were the real facts of the situation. His impressions he states in this little book, which disclaims the title of a treatise on reparations, but cannot avoid being one in reality. The author professes only to present the situation as described to him by British experts and German business men (who agreed on most essentials) in answer to his carefully prepared questions on prices, incomes, and the industrial outlook. His first impression, like that of the great majority of observers, was that "all betokened an economic life in which all were occupied and in which the interchange of goods and services was actively going on." But this, he concludes, was the outward appearance of a prosperity which had little solid foundation. In the first place, the difference between the internal and the external value of the mark, while giving Germany as regards her exports a considerable competitive advantage over producers in foreign countries with a more favourable exchange, has resulted in a great rise in the cost of living and the cost of production, since imports which include a great many foodstuffs have to be paid for in marks taken at their external value. In the second place, the incomes of large sections of the community have not kept pace with the rise in the general price-level. In a most interesting chapter on incomes and the standard of living the author reflects on the tendency since the war in the direction of the levelling up of the incomes of unskilled manual workers to the standard of the highly skilled, and on the fall of the incomes of officials in relation to those of manual workers. Thus a comparison of the pre-war and present salaries of the Lower, Middle, and Higher Officials shows that their incomes have been increased in round numbers roughly twenty-four times, twelve, and ten and a half times respectively. Taking then the average higher official (responsible civil servant or University teacher), and comparing his household budgets of 1913 and 1922, the author found that if his income had increased about twelve times, the main items of expenditure had increased considerably more than that, while the amount allowed for food—26 per cent. of income in 1913, 44½ per cent. in 1922—covered merely the bare necessities of life, and no butter or luxuries of any kind. Consequently life in the professional classes is one of constant self-denial. It is a pity that particulars of business men's incomes were not ascertained, but as to these something may be inferred from the chapter on the economic outlook. In this the author asks whether great industrial activity, increased

dividends and large sums placed to reserve, and a general lack of unemployment are real evidence of prosperity." The best answer is the remark of a German official who said, "All business to-day is merely a gamble in currency and exchange." Doubling of dividends and increase of nominal capital can scarcely make up for the loss of the purchasing power of the mark. In his discussion of taxation in relation to Reparations payments, Sir Henry Penson admits that evasion has taken place, and explains the German Government's serious arrears in the collection of Income Tax as chiefly due to the difficult transition from the old system of provincial and municipal collection of direct taxes to the new system whereby they are collected by the central Government. The book ends with a sane plea for a complete reconsideration of the Reparations question, on the ground that until the German Government can show sufficient surplus of revenue over expenditure it is hard to see where the Reparations money is coming from. Few will dispute his conclusion.

E. F. JACOB

Capital Control in New York. By D. C. BALDWIN. (George Banta Publ. Co., Menasha, Wis. Pp. xxiv + 255.)

WHEN in 1906 Mr. C. E. Hughes was elected to the Governorship of New York he had committed himself, in opposition to the Democratic plan of public ownership, to a policy of testing the possibilities of effective administrative control of public utility services within the State. This book is a chronicle of his works in fulfilment of that pledge: of the laws that he passed; of their many amendments; and of a great number of legal cases arising under them.

As this implies, Mr. Baldwin deals with his subject-matter from the point of view rather of the corporation lawyer or administrator than of the economist. Part I is composed of a précis of some fifteen laws showing the very limited powers at the disposal of the administration prior to 1907; and secondly giving an account of the series of laws, extensions and amendments by which those powers were strengthened between 1907 and 1913. The following Parts II–V deal successively with the nature of this extended legal control over the formation of new corporations, the additional capitalisation of existing corporations, refunding and reorganisation, and finally consolidations, mergers and transfers of stocks. Although the book is well

arranged and clearly written, few economists will have the vigour to attempt to distil from its 250 pages of well-compacted material such conclusions as may be obtainable with regard to the results of Governor Hughes' legal experiments. And little more can be done here than indicate some of the more important ways in which new law was applied.

It was early recognised that powers to regulate the quality of the services supplied by a corporation, and the rates at which those services should be sold, were not adequate in themselves; for if, as frequently occurred in New York city, a company was greatly over-capitalised, its struggle to pay interest and dividends inevitably led to inferior service at high rates, and so left a reforming Governor faced with an opposition of interests between investors and the public. His dilemma would be somewhat similar to that of our Rates Advisory Committee if, when they were called on to fix rates for English railways, they found that the various railway companies had issued securities far in excess of the amount on which a fair rate of interest could be paid at a reasonable level of freight and passenger rates. It was this difficulty which determined the character of Governor Hughes' legislation, and which gives this book its special interest.

The instruments which the Governor created to carry out his reforms were of the most modern type. They consisted of two expert Public Commissions (their composition is not stated) endowed with strong legal powers, and with a wide discretion in applying these powers to the particular circumstances of the corporations within their jurisdiction: such bodies as railways, gas, electricity, telegraph and telephone corporations. These two Commissions, as their powers were gradually perfected, assumed control over the capital operations of such public utilities throughout New York State. When a new corporation is to be formed they limit the sale of its securities to the expenditure actually incurred, and prescribe the purposes to which the proceeds must be applied; their engineers inspect the progress of the work; their accountants audit vouchers for items of expenditure and determine the provision to be made for amortisation of promotion and similar expenses, depreciation and reserves. When an existing corporation requests authority to make a new issue of stocks or bonds, the Commission responsible makes a detailed valuation of the property, defines the maximum permissible issue, possibly fixes the price at which bonds may be sold to the public, and lays down other provisions for the protection of the investor. The Commissions restrict the capitalis-

ation of reorganisations to the value of their property; they refuse or permit the consolidation of competing railways in accordance with their view of the public interests involved. In these and a great number of minor ways they bring about a closer correspondence between the value of a corporation's assets and the volume of its issued securities, thereby clearing the way for further regulations designed to ensure that the public is provided with an efficient and economical service.

Mr. Baldwin seems to show clearly enough, in the many cases he quotes, that the Commissions have been able to apply the law effectively; but he makes no attempt to estimate whether or no Governor Hughes' very thorough-going experiment has been an economic, as distinct from a legal, success. The answer to that question would seem to depend on whether the public cost of the many-sided legal and technical work carried out by the Commissions, together with the deterrent effect of their close control on the initiation of new public utility services, was outweighed by a substantial public advantage. And this question in its turn must depend, it would seem, on the magnitude of the existing abuses and the effect of the Commissions' work in reducing them. That the abuses were serious in 1906 seems clear enough. In New York city "the large traction systems were so loaded down with excessive bond issues that they found it impossible to pay fixed charges and at the same time furnish adequate service, and, even as it was, they were on the point of bankruptcy." The cases cited by Mr. Baldwin seem to make it equally clear that these abuses have been substantially reduced. The investor has obtained a considerable measure of protection as a result of the limitation of the corporations' powers to issue worthless securities; the public can no longer be freely exploited, either by a consolidation of competing interests into a monopoly, or by over-capitalised corporations staving off bankruptcy by charging exorbitant prices for steadily deteriorating services. It would seem that the Governor's measures have been justified by their results.

F. LAVINGTON

Le Système monétaire grec et le change. By CH. DAMIRIS. (Paris : Giard, 1920. Three Vols., pp. 363, 359, 238.)

THE Greek Act of 1920 on the issue of banknotes challenged public attention abroad, and not without reason, for it secured for Greece for six years (1912–1918) that were mostly years of war two rare advantages, viz. elasticity of the circulation and maintenance of the parity of exchange. But even though the Greek Act gave rise to much talk, few people had studied it thoroughly. M. Christ. Damiris, a young Greek economist who had already acquired note by his two books on *Emigration in the island of Zante* and *The Turkish Public Debt*, undertook to fill the gap, and has done so in a masterly manner. He begins by setting forth in fullest detail how the Greek system, which dates back as far as the time of Jean Valaority, late Governor of the Greek National Bank, originated, and exactly what it consists of. He then proceeds to show how it worked during the Balkan wars and in the Great War. In a third volume, enlarging on the question, M. Damiris enters on a comparison with the other monetary systems. He says that it was a mistake to either praise or criticise the Act of 1910 for its rare originality : the Valaority system is not an isolated occurrence, but one of the various aspects of the evolution of ideas in connection with the currency and the regulation of the exchange. It compares with the systems grouped under the heading of "gold exchange standard." And the author examines successively the Indian currency reform, that of the Philippines, and the Argentine Conversion Fund system. He also examines the various reforms enacted since the war in such widely different countries as Egypt, Norway, the various countries in America, and even Archangel. The Greek system, however, is neither an imitation nor a facsimile : compared with the above systems it shows improvements which establish its superiority. That is the reason why it was so much referred to during the war and after, and especially when the production of an international banknote was suggested, which, by the way, Damiris thinks an impossibility. But for the fact of Damiris' premature loss to Science—his death took place last summer—he would no doubt have added an appendix to his work, showing why the Act of 1910 could not prove effective in Greece to the very end, and why since 1920 various attempts had to be made, not any longer to maintain the parity of the exchange, but to prevent too great a rise in the rate of exchange.

These attempts, interesting in themselves, deserve to be studied. We may perhaps return to them in an article on the Greek exchange in the ECONOMIC JOURNAL, when we will take the opportunity of dealing at greater length with M. Damiris' work.

A. ANDRÉADÈS

Sixty Years of Indian Finance. By K. T. SHAH, B.A., B.Sc. Econ. London. (Bombay: Bombay Chronicle Press. 1921.)

MR. K. T. SHAH has written a very useful book reviewing in a lucid manner the growth of the revenue and expenditure of the Indian Government from 1860, when its first financial minister introduced its first Budget, to 1920. To expect an Indian economist with pronounced Nationalist views to discuss the questions with which the book deals with complete freedom from bias would at the present time be futile. But the author is too well instructed to definitely associate himself with the wild charges against British rule and financial policy which disfigure some books widely read and often quoted by educated Indians. He gives pros and cons with great fairness, and in fact it is sometimes a little difficult to be certain what his own final opinion is. Thus as regards protection the economic objections are stated with force and clearness, and he asserts that protective duties can in any case only be justified as a temporary expedient. He is quite aware that a country which has once adopted Protection as a plank in its fiscal policy has usually found its removal "impossible . . . owing to the growth of vested interests." On p. 265 he seems to have come down decidedly on the Free Trade side of the fence, but on the next page we are told that "proper protection to nascent industries is desirable," and that "the watchful might of the State in a Government resting on popular support might be trusted to see that the benefit of protection is not exclusively reaped by the capitalist class."

Very naturally he would like to see all the raw cotton produced in India used in Indian mills. He finds that one-third of it is exported, mostly to Japan, and that part of it returns in a manufactured state to India. He would encourage the investment of capital in new Indian mills by imposing an export duty on raw cotton. Interference with export might have "injurious effects on the cultivator," but "at the worst we would have to evolve some means of price guarantee." In a speech delivered last year in the Budget proceedings, Mr. Innes pointed out that

the Bombay cotton mills were very prosperous. If dividends ranging from 22 to 128 per cent., such as he quoted, do not attract capital for investment in new mills, nothing else is likely to have that effect. If Mr. Shah's proposed tax ever comes before the Legislative Assembly, Englishmen will probably not be its only critics. There have been distinct signs that representatives of the landholding class in India will look askance at Protectionist finance.

The author's account of the Land Revenue, Excise, and Income Tax policies is sober, and generally speaking well informed, and his comments on the salt tax and famine expenditure are fair. He realizes that, while mistakes may have been made, the Railway and Canal policy has been broadly justified by the fact that transport and irrigation now bring in a handsome profit to the State. The Post Office policy is deservedly commended. Regarding Excise he says, " It would be futile to charge the British Administration as having increased the drink traffic"; and again—" given the influence of revenue in shaping the Excise policy of the country we must admit that, within the limits thus set, the efforts of the Government have been directed to a reduction of . . . the use of the intoxicating drinks." He entirely approves of the measures taken to make direct taxation a much more important element in Indian taxation, and especially of the larger differentiation between big and little incomes.

He regards the " drain " due to home charges as the worst blot on Indian finance, and maintains that the only part of it which is justifiable is the interest on loans raised in London for productive expenditure. He proposes to abolish the other charges by raising any other loans in India and by doing away with the English element in the military and civil services " within a given period." That introduces a grave political problem which need not be discussed. But it may be said in passing that such an intemperate attack on the present Indian Civil Service as is to be found on pp. 106-108, coming as it does from a very intelligent and well-educated man, is a deplorable example of the growth of racial feeling in India and of evil augury for the future.

Mr. Shah's view of the functions of the modern State is that of a convinced Socialist. In his opinion the ultimate aim of direct taxation is to effect " a redistribution of wealth," and " the only way to bring about the fullest development of each country's resources without injuring the interests of consumers . . . is for the State to take upon itself the task of production, or at

least its regulation." He even suggests the nationalisation of the legal profession, advocates becoming public servants. He recognises that the reforms have so far been costly, but hopes for a national Government not afraid to raise taxation with a view to the initiation of a large programme of social reform.

If a statement on p. 78 is intended to imply that Lord Curzon's formation of the North-West Frontier Province was an instance of annexation, and apparently that is the author's meaning, he has fallen into a curious error. All that happened was that the new province was carved out of the Panjab.

It is a pity that the accounts of some years are given in pounds and of others in rupees. It is very confusing to find both in a single statement. Misprints are common, but press correction is much more troublesome in India than in England.

J. M. DOUIE

Die Geldprobleme von heute. (The Monetary Problems of To-day.) By RICHARD KERSCHAGL, Lecturer in the Commercial High School of Vienna. (München: Duncker and Humblot. 1922. Pp. 87.)

THIS pamphlet deals principally with the economic and monetary sides of inflation and deflation, and contains a valuable account of the efforts made by different countries to effect their monetary reconstruction. In Central Europe the progressive inflation has not only disturbed the monetary systems, but has also complicated most severely the problems of production. In some countries inflation is diminishing rapidly the rate of external exchange of the currency, while the price-level in the interior does not follow as quickly. This stimulates exports, and production has grown up under most irrational conditions, a fact which will have to be dealt with when the time comes for a stabilisation or deflation of the currency. On the other hand, the "stronger" countries, being hampered by their sound currency in their export, are also in a most depressing situation, their costs of production and their price-level being raised by their high rate of exchange in comparison with the "weaker" countries. So their production is seriously diminishing at a moment when the economic reconstruction of Europe needs the largest possible output of goods.

While, on the one hand, some countries have succeeded since the end of the War in depressing their prices partly by

means of direct deflation, partly by augmenting production, other countries have raised their price-level still further by progressive deflation and have failed in their attempts to enlarge their production. The different price-levels, which fluctuate from month to month, are the immediate causes, too, of the continual and vehement movements of the respective rates of exchange. Inflation in many countries has already proceeded so far, that the movements of the price-level are many times as violent as the quantity of new notes would justify. Dr. Kerschagl endeavours to explain these connections between the progress of inflation, the movements of the price-level and the rates of exchange by means of statistical tables, and reviews the situation of the most important countries from 1913 till 1920.

E. SCHWIEDLAND

La Riconstruzione Economica e Sociale in recenti pubblicazioni. By CARLO GRILLI. (Roma. 1920. Pp. 39.)

Il Protezionismo dopo la Guerra. By CARLO GRILLI. (Roma. 1921. Pp. 96.)

THE first publication is a review of recent writings on Reconstruction after the War, with illustrative comments from older writings and from the author's knowledge of affairs. It appeared in the December number of the *Rivista Internazionale di scienze sociali e discipline ausiliarie*, 1920; and deserved republication in pamphlet form. It begins, opportunely, with Professor Marshall's *Industry and Trade* (1919), a work that may be said " to close the old and open the new literature of economics " ; there is " a Tacitean serenity of judgment concerning facts and events." " Often, to one who studies these pages, the figure of the well-known contemporary economist of Cambridge takes on the patriarchal form of Adam Smith, or of Walras, or our own Pareto, men that see beyond their wide knowledge through their largeness of heart. No ' dismal science ' theirs." He notes that Marshall's judgment on Socialism is on the whole unfavourable, and that he would not find our present salvation in the extension of Government control; bureaucracy succeeds with routine, but progress must come from the initiative of individuals. Bolshevism and its failures furnish our author with fitting commentaries on this text. The crisis in the development of German scientific Socialism seems to him even more interesting than Bolshevism,

leading as it does to a variety of experiments in government both in Germany and Austria, especially in relation to Labour. After all, the great need of the time is what Carlyle prayed for in his time, Captains of Industry (p. 15).

From books and theories, he turns to Politics and Governments. He thinks the " Carthaginian Peace " will never become a true peace till victors and vanquished arrange terms on which both can work for the common good and prosperity. He evidently inclines (pp. 17, 18) to Mr. Keynes' proposals for revision of the Treaty. The chief writings on monetary difficulties are analysed, our author not always deciding between them but content to make them known. This is his way also with schemes of house-building and for dealing with the supply of coal and other materials.

In face of a multitude of contradictory counsellors suspension of judgment may be praiseworthy prudence. There is no doubt, besides, of our author's general position : " The economist concludes that, however humanity is led astray by passion, it is bound in the end to avoid gross violation of its natural economic and moral tendencies, as the ocean all through the tempests is seeking to settle down at its eternal level on the return of fine weather." Some will gain little consolation from this last simile (p. 39).

The treatise on Protectionism after the War, also a reprint from the *Rivista Internationale di Scienze Sociali*, 1921, is on a larger scale than that on Reconstruction, and is a useful compilation from English and American, as well as (to a less extent) from other sources. The author shows an extraordinarily wide acquaintance with English pamphlets and newspapers as well as books. No important part of the subject seems to be omitted. A full account is given of the disturbed exchanges and proposed remedies, as well as of American and English legislation of a Protectionist character.

The chapter on the position of England deals with facts by no means new; indeed they are supplied chiefly from the *Statist* and *Economist*, the Board of Trade returns and the *Manchester Guardian*. But perhaps we cannot too often be reminded of them. It is good for us to read, for example (p. 33) : " It cannot be denied that at the present time Great Britain has serious grounds for searching of heart; the United States and Japan have become great consumers of their own and foreign raw materials, and great exporters of manufactures; Continental markets, the chief vents for her largest industries, are convulsed,

contested, and shorn of purchasing power; Canada, Australia, India, South Africa, her proud dominions, are at various stages striving to complete their own economic autonomy; her sovereign is at discount on the dollar; the efficiency of her extractive industries is reduced by the slow action of the law of decreasing returns, and still more by the diminished product of labour, which is afflicting her manufacturing industries as well; her public finances are oppressed by War debts home and foreign, and by internal strife; the home market itself is undermined by the depreciation of the Continental exchanges; and there is a crowd of new political problems, economic and social, arising with the billows of Imperialism, Autonomism and Demagogy which the hurricane of the War has raised everywhere; there are the problems of raw materials, key industries, nationalising of industries, workmen's control of business, and more recently the problems connected with the fall of prices and the unemployed."

J. BONAR

Sharing Profits with Employees: A Critical Study of Methods in the Light of Present Conditions. By JAMES A. BOWIE, M.A. (Pitman's Industrial Administration Series. Pp. 219.)

IN this work Mr. Bowie has made a valuable and opportune contribution to our literature on industrial organisation. The author evidently possesses to an unusual degree the knowledge of a trained economist coupled with an intimate grasp of the practical problems associated with workshop administration. The title does not quite do justice to the book itself, for throughout its pages the student will find helpful criticisms and suggestions covering a wider ground than that implied in the term "sharing profits."

Mr. Bowie gives substantial reasons in support of the Co-partnership ideal in industry, but does not consider that it can be satisfactorily realised by way of Profit-sharing. "So far the general position has been arrived at that Cash Profit-sharing among the wage-earning class is a mistake. The wrong method is to give and then try to enlighten the worker as to the meaning of the gift." Viewed in the light of the criticisms against Cash Profit-sharing we are told Co-partnership shows up well.

By Co-partnership the author means a system of "Contributory Co-partnership" where the "initiative must come from

the employee" and involve some principle of selection. By this method "it is insured" that only the "more thrifty and intelligent workmen" will in the first instance have bestowed on them "industrial enfranchisement."

Mr. Bowie presents a strong theoretical case for "contributory Co-partnership," and yet one cannot help feeling that so far as he relies upon practical experiment to support his argument, he depends in the main upon examples of Co-partnership which have been reached through the application in the first instance of the system of Cash Profit-sharing which he condemns. "Normally and historically," he tells us, "it (Co-partnership) had its origin in Profit-sharing." This, of course, does not dispose of his contention, but it suggests that we shall be better able to form a sound judgment on the possibilities of "Contributory Co-partnership" when we have had more experience of its practical application. "The merits of Co-partnership are based not so much on the method of developing it as on the actual results it achieves." Possibly so, but should we not be cautious in condemning the "method of developing" hitherto practised, until we can present with a greater weight of authority another method?

Caution in accepting Mr. Bowie's conclusions on this point does not lessen one's gratitude for the service he has rendered by his constructive criticisms of industrial organisation.

Labour's attitude to Co-partnership is fairly stated, and the antagonism of the "extremists, who regard it as being an insidious attempt to give labour vested interests in the continuance of a pernicious system," is, we are told, based "on specious arguments which will not bear examination.

"He who does not wish to see the present industrial system altered must be indeed barren of ideas. He who subscribes to violent and catastrophic measures can be no student of history. He who refuses to accept instalments of progress and suspiciously rejects them all as capitalistic devices is, however much he subscribes in theory to the policy of gradual transition to a new order, nevertheless an enemy of all solid progress."

Mr. Bowie boldly faces the truth that the wide application of Co-partnership would have a far-reaching effect on Trade Unionism, but holds that "modifications of structure and function need not mean disintegration." The present development of Trade Unionism is, he contends, rapidly putting into the hands of the worker control, but without the sobering knowledge of the whole mass of conditions which dominate industry.

"The greatest hope of a time of peaceful progress and transition lies in the Co-partnership Movement." Through its agency the just aspirations of "millions of workers" can be realised, whilst "all that is good in personal initiative is preserved."

The author is, and we think wisely, averse to any Parliamentary compulsion to adopt Co-partnership methods, for "unless the movement by its own inherent soundness makes its way in industry, it is not likely to do so as a Government recommendation."

The worker should be free to participate or not in the scheme, but if he chooses to join he should, in the view of the author, "invest." Inducements to this end should be offered. The precise nature of these must depend upon circumstances, but they can take the form of "easy acquisition, issue below market value, a guarantee of capital, early credit of dividends, assured minimum return, extra dividends, own ordinary Shares or an accompanying Share of profits." The object aimed at should be to make him a "real live investor" interested in the prosperity of the firm. There is a useful chapter dealing with typical Co-partnership schemes, but Co-partnership Manufacturing concerns which have been organised by workers for workers are dealt with very briefly. Some of these are now on a considerable scale and have been in existence many years. It would have been helpful if their experience in the practical application of Co-partnership had received fuller treatment in the volume before us.

The Whitley scheme is commended as a "first step" in the direction of "democratised" industry, leading as it would do to a further knowledge of economic facts and thus providing "a common platform for capital and labour."

There are useful chapters on Collective Output, Bonus Schemes, Sliding Scales, and Miscellaneous Schemes.

The final chapter deals with the Future of Profits. These, we are told, could only be abolished "by eliminating the service which makes profit a necessity."

The book is well arranged, and the brief summary of criticisms and suggestions at the end of each chapter is to be commended, as is the admirable list of authorities for reference given at the end of each of the four "parts" into which the book is divided.

HENRY VIVIAN

The Settlement of Wage Disputes. By HERBERT FEIS. (New York. 1921. Pp. xviii + 289. Price $2.25.)

PROFESSOR FEIS, as is stated in his Preface, some years ago "became convinced that there could be no permanent peace under the wages system, once different interests became organised, unless a clear body of fundamental principles applicable to all industries are supported and enforced" (p. viii). The aim of the book, therefore, is to formulate, as far as such a feat is possible, definite principles of wage settlement with the object of securing industrial peace, or at any rate of approaching more nearly to that goal. The book is likely to be of more value to American than to English students, as most of the author's conclusions are based upon British and Australian legislation, and upon recent experiments in wage adjustment in this country. The book will, however, be useful to English students who are not familiar with the material that Professor Feis has collected and arranged, as he has brought together in a compact form a good deal of information the sources of which are scattered and not always easily accessible.

The principles he lays down are not particularly novel. They may be roughly summarised as follows: a commission or court for the adjustment of wages in each industry, on the lines of the Whitley Councils, with a central court through which whatever policy was adopted would be administered by a Government agency; the principle of standardisation for the higher-paid and well-organised grades of labour; the principle of the living wage for the lowest-paid industrial groups, on the lines of our Trade Board agreements; adjustment of wages to movements in prices, with reference to index numbers. In addition, some form of regulation of profits is rather haltingly suggested. All these points are of course treated in detail, and the difficulties in the way of their application are fully considered and discussed. The first six chapters—that is, nearly half the book—once more (very carefully, no doubt) go over ground which has already been well trodden. They deal mainly with theories of wages and the problem of wages and price movements. Chapters III and IV, which the author thinks "may prove difficult for the ordinary reader" (p. vii), do not appear to be beyond the powers of people of average intelligence. They deal with a very well-known branch of economic theory—the causes which determine the share in distribution obtained by Labour

in the form of wages, and the causes determining the distribution of wages among the wage-earners—and are based mainly on the teaching of Dr. Marshall. The book in some respects suggests a compilation, and it would have been more readable if the ideas it contains had been set out in Professor Feis's own words, instead of so largely through the medium of numerous quotations from other writers.

Professor Feis wants industrial peace. But is industrial peace attainable under the existing industrial system? There are even those who would ask, is it desirable? There are bound to be disputes as to whether or not the principles laid down should be adopted. There will be disputes as to the interpretation of any principles that are adopted, and further disputes as to their application. In fact, so long as industry is controlled by property owners, and manned principally by propertyless wage-earners, with little but their weekly wage between them and the poor law, there is bound to be friction. There can be no real peace until the injustice, or at any rate the sense of injustice, arising from the present distribution of income is removed, and until it has been found possible to give every member of the community who is willing to work to the best of his ability the opportunity of a decent life.

Professor Feis is certainly not optimistic with regard to the efficacy of the principles he lays down, and he more than once hints that justice must be secured before peace can be in sight. He seems, however, to have pointed out all the possibilities that do exist under the present system with regard to the settlement of wages and of running the industrial machine with the minimum of friction. Perhaps some of his suggestions may be adopted in the United States, and experiments there may possibly throw new light on the problem and afford some guidance for the future.

H. SANDERSON FURNISS

Labour Control and the Management of Enterprises. By ROGER PICARD, Fellow of the Faculties of Law. (Paris: Marcel Rivière. 1922. Pp. 286.)

RARELY has a book appeared more opportunely than this volume. The question of Labour Control is certainly one of the most discussed and debatable of present-day questions. Its economic importance is undoubted; to say nothing of the political

and social significance of the question. Its practical importance is also obvious because there are few questions of Industrial Organisation to which those in charge of commercial and industrial affairs are devoting more attention. This is partly the result of natural developments and partly of deliberate action on the part of those in control of Labour and Social Organisations.

In short, the appearance of the book coincides with the stoppage of the Engineering Industries through a dispute concerning the very subject with which the volume deals. The author approaches the subject from a broad and sympathetic point of view, analysing the underlying causes, reviewing the various forms in which it appears, studying its application in practice and its relation to the various forms of Industrial Organisation. In his introduction he points out that Labour Control has been the object of many schemes, developing in France by groupings of very different origin; *e. g.* Roman Catholic Organisations, Socialist and Labour Syndicates, Unions of Employers and Government Departments. In a number of countries Labour Control has been organised in some cases voluntarily and in others on a compulsory basis. In several countries, notably Italy, France and Belgium, it has been the subject of considerable legislation. There are few countries in which numerous, if isolated, experiments have not been made, and in all projects have at any rate been discussed with a view to applying the principles of Labour Control.

In the first part of his work the author examines all the schemes that have been tried up to date and points out their many differences, not only as to the details, but also as to the *spirit* that actuates them. Whilst the more revolutionary bodies consider the institution of Labour Control as the procedure preliminary to expropriation, the more orthodox Trade Unions claim it only as a natural and necessary complement of previously acquired " Rights of Labour "; they view it as a means for the worker to educate himself in economic affairs, as a jumping-off point for the most radical transformations of the present economic system. The schemes promoted by Unions with the Roman Catholic bias tend to satisfy both the idea of social justice and the respect for social order,—a state of things willed by God. A common idea underlies all the schemes of this character, namely, that in the factories and in economic life sovereignty by right divine has had its day and that the people have the right, if not to participate in control of affairs, at least to ask for an account of the acts of the *de facto* governors.

In the second part of the work we get an exposition of what

legislation has effected with regard to Labour Control in France, in England—with its Trade Boards Act, Whitley Committees, Railway Councils, Wages Boards, etc.—in Russia, Germany, Austria, Norway and Luxemburg.

The third part of the book discusses the numerous experiments due to the private initiative of the " beneficent employers " that have been made with a view to a more democratic system of relations between workers and employers of labour. Special reference is made to the United States and Canada and to various European countries where no administrative measures have as yet been adopted.

After reviewing the whole field the author draws a number of important conclusions that may be summarised as follows :—

All the various systems under examination reveal as an underlying motive a desire to enable the employees to participate more largely in the life of industrial and commercial concerns; but the originators of these systems for organising Labour Control are not all actuated by the same motives or to the same degree: they differ as to the extent of application which is to be allowed for control, and they do not in all cases equally ascribe to it the same value as an instrument of social transformation. Many employers introduce Labour Control into their works from a spirit of social justice, in agreement with the Roman Catholics or neutral democrats; but a large proportion take a more utilitarian point of view, and look upon it as a means of making their employees' efforts more intense, as a concession to moderate the vehemence of their claims, or as a means of smoother working and more efficient production. The employees demanding control seek recognition of a right that they regard as arising from the very exercise of their functions. They consider themselves in a large measure the creators of the prosperity of industry; they want to know how it operates and to give their opinion upon and share in its methods of management.

But every right has its limits and its obligations. How is the line to be drawn with regard to Labour Control as between the various parties interested? *This appears to be the central problem.* The systems described in the course of this book have tried to solve the problem in greatly differing ways; a study of these ways shows various degrees in the workers' participation in the management of enterprises where some form of Labour Control is admitted or operative in practice. Labour Control is conceived by Communists as the " indispensable prelude to their taking possession of the factories," and by Syndicalists as a stepping-

stone towards nationalisation. The writer declares that he does not intend to judge the intrinsic value of such hopes, or how far they may be realised. He does emphasise that the realisation of the aims of those advocating control by labour constitutes in itself a sufficiently important object to command our attention and sympathy; but he sounds a warning note that these aims cannot mark a final stage in social and economic evolution. All are satisfied that humanity might well live happily under an economic system very different from that which at present is giving such striking proof of its weaknesses as well as of its powers of resistance.

The fact that the system advocated contains within itself a democratic force and possibilities of social justice, influences the author sympathetically towards the question of Labour Control; and if, by greater and more enlightened zeal in production, it should happen to cause an increase of economic and social efficiency among the nations that adopt it, the author naturally hopes that France may not be behindhand in recognising its merits and in speedily incorporating into its Labour Code some sound schemes based upon the principle of admitting the workers to a greater share in management.

It cannot be said that the volume solves in any practical fashion this highly debatable problem, which the author regards more from a *philosophical* than a *practical* point of view. It is the practical part of the question, *e.g.* of works discipline, that occasions the most comment in England, where we may look for the solution rather to the common-sense adoption of practical methods of compromise rather than to the realisation in practice of any philosophical ideals. Certain it is, at any rate, that the next few decades are likely to bring this question into greater prominence than ever, but whether the solution will be found in legislation, in the action of employers or that of the workers' organisations the future has yet to disclose.

GEORGE R. CARTER

Karl Marx and the Present Unrest. By the Right Hon. J. A. MURRAY MACDONALD, M.P. (Fisher Unwin. 1922. Pp. 48. 1*s.* 6*d.*)

OF writing books on Marx there is no end; and this is the more surprising as there had been such a general agreement among economists, including many Socialists, that Marx has hardly

presented a case to answer. But we need not quarrel with our author on this matter, since his pamphlet is not meant as a contribution to economical so much as to political literature. The part of it relating to social unrest is quite as interesting as that on Marx. Indeed some readers will find it the more pleasing of the two, going as it does with great earnestness and sympathy into the relations of the Labour Party and the People as a whole from whom many of them would sever their clients as a separate class. A passage in the Introduction (p. 11) gives us the essence of the book: "We have been hitherto distinguished above every other people for maintaining the continuity of our life and for settling our domestic troubles by an appeal to our common reason and by a general willingness to accept and abide by the results of the appeal. Relying, then, upon the strength and saving power of this national characteristic and encouraged by the example of it recently given by the Labour Party itself, I purpose, as a contribution towards such an appeal, to give reasons why we should not accept a Socialist system of life, and why therefore we should adhere both in principle and in general structure to our existing system. In pursuing this purpose I shall in the first place consider the economics of Socialism as set out by Karl Marx in his book on Capital. There were Socialists before Marx and there may be Socialists after Marx has been long forgotten. But it is his book which is universally accepted as the text on which the socialism of our day founds itself. By the truth or falsity of its doctrines this socialism stands or falls." "I shall in the second place consider what would be the moral effects of the adoption of a system of socialism whether Marxian or any other."

The promises are well fulfilled. The analysis and criticism of Part I, The Economic Aspect, are clear, terse, and logical; there is no waste of words or admixture of rhetoric. Even in Part II, The Moral Aspect, the level of calm reasonableness is never lowered. In these respects the book is a model for political writers.

J. Bonar

History of Labour in the United States. By John R. Commons and Associates. (Macmillan Co., New York, 1921. 2 vols., pp. xxv + 623 and xx + 620. Price $10.50.)

This work was first published in 1918 and was reprinted in 1921. The Department of Economics and Sociology of the

Carnegie Institution of Washington formed a plan of a series of "Contributions to American Economic History," in which the *History of Commerce* by Professor Johnson and colleagues appeared in 1915, Dr. Clark's *History of Manufactures from* 1607 to 1860 in 1916, and Dr. Meyer's *History of Transportation* in 1917. The Department was then dissolved and reorganised outside the Carnegie Institution as the Board of Research Associates in American Economic History, Professor Commons being made director of the Labour Section. He had already been responsible for the publication of eleven volumes of *Documentary History of American Industrial Society* (1909–11), consisting of selections from original material collected by his students during twelve years. A number of monographs, published and unpublished, crystallised out of the mass of raw stuff, and on these as well as on their own researches each of the six collaborators has drawn for his or her contribution to these two volumes, Professor Commons editing the whole and prefixing an introductory chapter. The general object of all has been to present the history of the Labour Movement as a social and political force, "as distinguished from the history of labour organisations or the history of the technical application of labour to the processes of production."

The familiar story of the emergence of industry through the stages of itinerant work, resident custom-work, and retail shop to wholesale manufacture, with the gradual separation of merchant, employer, and journeyman, is the theme of the first section. It is interesting to observe the extent of State support and protection the nascent industries received in loans, bounties, the prohibition of the export of raw materials, and even monopolies. All this was in the ultimate interest of the farmer community, and for the same reason prices and wages were controlled. To secure a sufficient supply of goods Virginia forbade mechanics "to take part in any tillage of the soil," and to protect the good employer quality was controlled. After the close of the revolutionary war the spread of transportation brought different producing centres into competition, and "the modern struggle between capital and labour has its origin in the wholesale order stage," for wages are cut by the merchant employer to secure markets. "The first authentic organisation of a single trade and the first strike of wage-earners" took place in 1786 at Philadelphia in the printing trade, and during the next forty years there were isolated unions and sporadic strikes—particularly in the printing and shoe trades—but no Labour Movement. Attempts to crush the new spirit by prosecutions for conspiracy in 1806–15 failed. There

were educational societies which also loaned money to young mechanics; there were benevolent institutions of masters; there were societies like the Pennsylvania Society, which advanced money for the founding of factories, the building of warehouses, and the establishment of markets. We have a picture of a community creating industry by common action, not of the dramatic uprising of strong individuals. Gradually the workman became completely separated from the employer, a strong impulse thereto being given by the growth of the merchant capitalist and his participation in industry, which, especially in the shoe trade, created the sweat-shop. From divergence of interests grew hostility resulting in strikes and prosecutions for conspiracy, while the workers intermittently sought refuge in co-operative production and in a short-hours movement.

The failure of a strike for the ten-hour day in 1827 led to the formation at Philadelphia of the first Labour Party in the world, with a definite policy of producers against consumers, of poor against rich. More leisure, better education, non-imprisonment for debt, reform of the militia law were the chief planks in the platform, and political was preferred to union action. The Philadelphia Movement was smothered in local politics in 1831. The New York Labour Movement of 1829–32 was disintegrated by extreme factions, and not for a long time did the Labour Movement in the States free itself from the charges of "agrarianism" (which quaintly enough meant the equal distribution of property) and "infidelity" (from association with Robert Dale Owen). Political action spread to other States, but the New England Association of Farmers, Mechanics, and Working-men of 1831–4 was by far the most important organisation and was mainly concerned in promoting a ten-hour law and in procuring a democratic public school system. Like our own Chartist Movement, the American Labour Movement failed, but in later years the survivors saw their policies substantially carried out by other parties.

The extension of the markets and the pressure of the merchant capitalist for cheap labour of women, children, convicts, and half-trained apprentices who had broken their indentures led to a revival of trade unionism in 1833, and a gradual advance from mutual insurance to trade protection. The new form of union was a local union inclusive of several trades (the New York Union of 1833 started with nine), each of which might or might not have a trade society of its own. During the boom period of speculation and paper money which culminated in 1837, the

unions were aggressive and successful in obtaining shorter hours and higher wages, but their success consolidated the employers against them and there was a fresh outburst of conspiracy cases. The unions even reached out after a national union, but these efforts were premature. The currency crisis of 1837 brought about a depression which lasted till 1842; unions and wages alike came crashing, and men turned their minds again to politics.

Depression lasted till 1852, followed by another speculative period to 1857, and another period of hard times till 1863. The immigration and housing problems aggravated the feeling of social unrest and produced a crop of Fourierist and co-operative schemes and of currency plans on a labour basis. The doctrine of the natural right to the soil also reappeared, taking practical form in the homestead movement, and with it was associated a new ten-hour movement, partly through legislation, partly through union action. Characteristic, too, was the series of national industrial congresses. Trade-unionism revived about 1850, with the development of collective bargaining, labour exchanges, and the union shop.

The period 1860-77 "witnessed the distinctly American philosophies of greenbackism and the eight-hour day; the rise of the agitation for the exclusion of Oriental labour; the invention of the trade union label; the first national trade agreement; the establishment of the first government bureau of labour; the organisation of the first permanent labour lobby at Washington; the enactment of the first eight-hour legislation, and the earliest laws against 'conspiracy' and 'intimidation.' The period also saw the organisation of the first national employers' association and the first national labour party. Pre-eminently it was the period of nationalisation in the American labour movement. Back of it all lay the nationalisation of the economic life of the country."

The National Labour Union was disintegrated by the panic of 1873, but the greenback party continued, on the labour side, to seek through national currency funds for co-operative enterprises, on the farmers' side to maintain prices. A period of violence followed, marked by the murder society of the Molly Maguires and the desperate strikes of 1877. Socialism developed among the Continental immigrants and, as in Europe, the anarchists sloughed off till the bomb explosion of 1886 at Chicago wrecked both parties. Greenbackism and the anti-Chinese movement continued, attempts at international labour union failed,

slowly the Knights of Labour were organising the unskilled. The first real symptom in the upward trend of the Labour Movement was the rapid multiplication of the local trade councils from about 1880, then came renewed activity among the national unions and attempts to create a national federation. The trade unions appealed to skilled mechanics and eschewed politics; the Knights of Labour stood for the solidarity of the workers and welcomed all forms of action. The depression of 1885-6 produced a great upheaval—a burst of strikes and a growth of unionism. The split between the Knights and the unions developed, and the American Federation of Labour was formed with pure economic functions. The employers also organised, using violent means of oppressing labour. Productive co-operation was "tried out" and failed in 1884–7. Henry George's single-tax movement next captured the Labour imagination in 1886, and numerous efforts were made at independent Labour parties.

The skilled unions grew stronger, and by 1890 the Knights of Labour were virtually liquidated. There was a new eight-hour agitation, but the Homestead defeat of 1892, followed by other reverses, shook the unions. Now, however, the unions were strong enough to remain permanent even in adversity—a great new feature of the movement. The workmen learned, first, that the Government could defeat any revolutionary policy, and secondly, "that the employers had obtained a formidable ally in the courts," as the injunctions against trade unions showed. In 1893 a new Labour programme was adopted, and about the same time the propagandist activity of the Socialists became more pronounced. There we may leave the story, for the participants in and observers of the events of the last quarter of a century cannot possibly obtain a true perspective of the period.

This very scrappy summary may serve to indicate the importance of the work under review. It is fully documented, as the bibliography of forty-seven pages shows, and it is written in a clear and interesting style without any obvious bias. All who have taken part in its compilation are to be congratulated.

HENRY W. MACROSTY

Die Englische Wirtschaft. Von Prof. Dr. HERMANN LEVY. (Leipzig and Berlin: B. G. Teubner. 1922. Pp. iv + 153.)

THE firm of Teubner is issuing a series of manuals dealing with English and American civilisation (*Kultur* is the German

term used), and no better authority than Prof. Hermann Levy could have been found for an account of the economic life of this country. If we are rightly informed, Prof. Levy was during the war attached to the submarine department of the German Admiralty as Economic adviser, especially in regard to conditions in England. He knows his subject well, both from extensive reading and actual experience. Many will recall his lectures at the London School of Economics, and his books, interesting and informing alike, on Trusts and Cartels, and on Large and Small Farms.

In the present little volume he gives his fellow-citizens a very readable account of modern England. Prof. Levy apportions to geography and race their due influence on history; he admires English commercial enterprise in the sixteenth and seventeenth centuries; and furnishes his readers with a plain narrative of English Economic development down to the time of the Industrial Revolution.

The English student will hardly expect to find anything new or startling in Prof. Levy's presentation; the German reader will, however, be provided with a pretty good picture, with the details correctly filled in. What impression will he carry away with him? An admiration for English persistence and English achievements; a realisation that Trade Unions first arose in England, and that Arbitration Boards for settling industrial disputes are the outcome of English practical common sense; and an appreciation of what the legislature has done to protect the worker. But of the future he will be doubtful. Prof. Levy sees in the England of to-day a struggle between old and new principles, in particular between the individualism of the nineteenth century and the collectivism of the twentieth. No longer are the middle classes predominant in England; their place has been taken by the working classes. Prof. Levy suggests that tendencies in the England of to-day are about to take up the thread where it was broken in the reign of Charles I. There is again apparent in the England of to-day, as in that of Charles I., the increasing power of bureaucracy. Prof. Levy points to recent legislation in England as showing the growing interference of the State in the Economic sphere—to the Insurance Act, which, because it tended to undermine self-reliance, was something of a puzzle to the old-fashioned Liberal Englishman; to the Development Act, and the whole sheaf of Bills recently adopted by Parliament. One result of these measures is to increase the army of Civil servants; Prof. Levy instances the

creation of the Ministry of Labour and the augmentation both of the work and the influence of the Ministry of Agriculture. The Government of Charles I. has been termed a government of Committees; the government to-day, certainly in the field of Economic activities, is, Prof. Levy maintains, its exact parallel, as witness the Small Holdings Committees, the Works Committees, Insurance Committees, Local Pensions Committees, and so on. The experiences of the nation during the war are responsible for the change. The principle of *laissez-faire* had to be sacrificed then; and its return to power is hardly likely. Perhaps the best illustration of this fact may be found in the increasing support being won all over the country by Protection, and the weakening of Free Trade. In fact, Prof. Levy sees a sort of new Mercantilism gradually taking root in England. One of the lessons of the war was that a Free Trade policy did not make for national safety. Since national safety is of vital importance, economic considerations will have to be sacrificed to those of a political character. The price is high, but the country is determined to pay it. Whether in the long run the English people will submit to this burden, Prof. Levy leaves an open question. It will depend, he says, on the result of the struggle for mastery between a policy of peace and a policy of might.

M. EPSTEIN

Die Reform der Staatswissenschaftlichen Studien. Fünfzig Gutachten im Auftrage des Vereins für Sozialpolitik, herausgegeben von Dr. J. JASTROW. (München und Leipzig. 1920.)

Krisis der Wirtschaft und der Wirtschaftswissenschaft. By ADOLF GÜNTHER. (Dresden. 1921.)

BEFORE the war Philosophy and History were the most popular subjects of study at German universities; to-day the premier position is taken by Economics. Lecturers on Political Economy cannot find lecture-halls large enough to accommodate all those who are thirsting for information on the economic aspects of human affairs. The knowledge that is thus pursued is rather of the practical kind, of the sort that will enable men and women students to earn a livelihood when their university courses have been completed; and since the demand for instruction in Economics was of a new kind, teachers of Political

Economy in Germany realised that it would be necessary to review the old courses and consider the advisability of providing new ones. What more natural than that they should take counsel together, or that the Verein für Sozialpolitik, the creation of Schmoller, of which practically all the German Economists are members, should have undertaken the inquiry?

Fifty specialists gave their views, which are printed in the Report edited by Prof. Jastrow. Needless to say, very many questions are considered, notably whether Economics should form part of what with us is termed the Faculty of Arts, whether it should be joined to the Faculty of Law, or whether it should have a Faculty of its own. Each of these suggestions finds its advocates. Indeed, the variety of the views propounded in the Report is remarkable. There seems to be no general agreement on any problem.

It is impossible to give in a short space anything like a comprehensive analysis of the opinions reported. A few, however, may be mentioned. Prof. Wilbrandt advocates the division of the study of Economics into two parts, one more general which students of all faculties should be obliged to attend, and the other, to deal with what may perhaps best be termed "practical Economics," for those who intend to enter the Civil Service or become administrative officials. The Economics Faculty of the University of Tübingen suggests that a new degree or title should be adopted, something parallel to Civil Engineer, to indicate that a man or woman is a trained Practical Economist. No dissertation should be required for this examination. The question of printing dissertations, as Prof. Günther indicates, has now become serious in Germany. In view of the high cost of paper and printing, the majority of students simply cannot afford the luxury; and the request from Tübingen, while not entirely influenced by this consideration, looks to it as a recommendation.

The Report conveys the distinct impression that the study of Economics in Germany is at present passing through a crisis, and a perusal of Prof. Günther's short essays only strengthens the conviction. There appears to be uncertainty as to method, goal, and organisation. Günther mourns the failure of continuity, the lack of tradition. All the great names, the men who founded "schools" and enjoyed a numerous following, have been gathered to their fathers, and those who have succeeded them, many with splendid work to their credit, are obliged to begin afresh. The old teachers set a standard for examinations; the new men

have not yet arrived at a standard, or, worse still, attach no importance to examinations. On the other hand, so great is the number of candidates that those teachers who strive to do their duty in examining work have their hands so full and their time so occupied that little energy is left them for research. Moreover, Günther maintains that whereas the needs of the day call for higher achievements than ever before, the average quality of students' work leaves much to be desired. It is worse, not better, than before.

Günther is an advocate of hard work; he eschews easy "Introductions"; he has no sympathy for either the Socialist Utopia of Ballod or the Bourgeois Utopia of Rathenau. Though he speaks of the "triumph of lies" in England both during and since the war, he recognises that English Economists are able to express themselves more succinctly than Germans, and commends the brevity to his colleagues. He is troubled by the economic crisis in Germany; he deplores its effects on students, on publishers of books on Economics, and on the reading public. He deplores the death of Schmoller, whom he regards as the foremost German Economist of the last generation; and concludes with the hope that he may soon have a successor who, like his hero, may unite within himself a love of Fatherland and devotion to humanitarian ideals.

M. EPSTEIN

The Story of the Agricultural Club. By SIR HENRY REW, K.C.B. With a Foreword by the LORD BLEDISLOE, K.B.E. (London: P. S. King & Son. 1922. Pp. xv + 205.)

THIS is an interesting account of a very interesting and successful experiment. The Agricultural Club was "an offshoot of the Agricultural Wages Board." Many members of that Board had to come up to London the day before its meetings, and it was a happy thought which suggested the formation of a club to discuss problems of agriculture and rural life on the evenings previous to the meetings. All members of the Wages Board and (subsequently) of District Wages Committees were, together with officers on the Board's staff, made eligible for membership without election; and other persons, not exceeding twenty in number, might be elected. Sir Henry Rew was President from the outset and attended thirty-six out of the thirty-seven meetings of the Club.

"The distinctive character of the Club," Sir Henry Rew says, "was that farmers and agricultural labourers were placed on an absolute equality, and that the maintenance of this equality was the basis of the constitution;" and there can be no doubt that its existence helped to make the working of the Agricultural Wages Board smoother, and contributed not a little to that growth of mutual understanding between the leaders of the men and the leaders of the farmers which, in spite of differences of opinion, was one of the most remarkable consequences of the establishment of the Wages Board. At the meetings of the Agricultural Club landowners, farmers, labourers and Government officials smoked and talked together in a friendly social atmosphere, the subjects of discussion being problems connected with agriculture but outside the actual range of questions which the Wages Board had to settle. Lord Bledisloe describes the result in his Foreword :—"Never," he writes, "have I heard the voice of the son of the soil ring truer than at these historic gatherings. The Press was unrepresented. The farmer, the landowner and the worker alike spoke their true minds to one another fearlessly and honestly. Notably so the worker. What we always listened to was the authentic voice of rural labour, tinged oftentimes with a touch of true poetic sentiment which carried its earnest appeals straight to the heart of its audience." The cleavage of opinion was by no means always a class division. For example the plea for small holdings made by Mr. George Nichols, one of the pioneers of the revival of agricultural trade unionism, was strongly endorsed by Mr. Christopher Turnor, who is a large landowner, but was criticised by Mr. W. R. Smith, M.P., President of the Agricultural Labourers' and Rural Workers' Union, and by Mr. George Dallas of the Workers' Union, as well as by Mr. Orwin, the Director of the Oxford Institute for Research in Agricultural Economics.

Sir Henry Rew, to whose "far-sighted and statesmanlike hand" the Club, as Lord Bledisloe points out, really owed its foundation, has been very happy in the plan of his book. He takes certain problems and devotes a chapter to each of them, quoting at length from papers read to the Club and from the discussion they aroused. By this method he is enabled at once to illustrate the Club's activities and to preserve much of what was most interesting and important among the things read and said at its meetings. Especially notable, perhaps, are the interesting facts about the intensive production of fruit and vegetables quoted from a paper by Mr. R. R. Robbins, late

President of the National Farmers' Union (pp. 27–29), the valuable account of agricultural costing and its problems by Mr. H. G. Howell (pp. 32–44), the stimulating paper on "British Agriculture as a Business Proposition" by Mr. J. H. Guy, an American, who was then Assistant Financial Secretary to the Ministry of Munitions (pp. 51–64), Sir Daniel Hall's discussion of the problem of the training of farm labourers (pp. 65–68), Mr. Castell Wray's extraordinarily interesting scheme for agricultural continuation schools (pp. 79–80), Mr. W. R. Smith's remarkable warning about the insecurity of a "political basis" for agriculture (p. 95), Mr. A. C. L. Rogers' graphic, if somewhat conjectural sketch of the history of land tenure in the Middle Ages (pp. 116–122), and the same author's very useful comparison of agricultural hours and wages in different countries (pp. 176–183). The discussion of housing problems by Lord Astor and others (pp. 134–145) also deserves special mention.

Sir Henry Rew mostly keeps his own opinions in the background. It is significant, however, that he speaks of the method by which the system of guaranteed prices was to be applied under the Agriculture Act of 1920 as one "which appeared plausible on paper but in practice would probably have been extremely difficult to apply satisfactorily," and adds that "it was—perhaps fortunately—never tested" (p. 94). The repeal of the Act he quite justly describes as "perhaps one of the most remarkable Parliamentary events in constitutional history" (p. 82).

REGINALD LENNARD

The Ricardian Rent Theory in Early American Economics. By JOHN ROSCOE TURNER. (New York University Press. 1921. Pp. xx + 221.)

THIS book is the result of what must have been a somewhat arduous piece of research. It contains an account of the lives and teachings of a large number of American writers on economics from the beginning of the nineteenth century down to about 1880. The study covers a rather wider field than is indicated in the title, for Professor Turner, in reviewing the contributions of his authors on the Ricardian doctrine of rent, is quite naturally —in fact, almost inevitably—led into an examination of their opinions upon the theory of value, the theory of population, and the law of diminishing return. According to the author, most of

these writers, whom he finds "worthy but without fame," have been inexcusably neglected by students of the history of economic thought (p. xv). Many of their names are certainly little known; some of them, for instance, are not to be found in Palgrave's *Dictionary*. Others, such as H. C. Carey, Tucker, Amasa Walker, and Perry, are, of course, familiar to English students.

While some of the American writers discussed are perhaps deserving of more attention than they have received, others hardly seem to justify the efforts Professor Turner must have taken to disinter them. The interests of Newman, for instance, are described as "mainly in subjects other than political economy," while "*The Wealth of Nations* seems to have been almost his only source" (p. 59). Several of the writers treated were primarily theologians, a fact which probably accounts for the strangeness of some of their speculations on the population question. For instance, Bowen, in criticising Malthus, says: "In those facts which appear so alarming to the Malthusians, I see only indications of a beneficent arrangement of Providence, by which it is ordained that the barbarous races which now tenant the earth should waste away and finally disappear, while civilised men are not only to multiply, but to spread, till the furthest corners of the earth shall be given to them for a habitation" (p. 150). Bowen does not appear to have considered the views of the barbarous races as to the beneficence of the arrangement. Many other examples could be quoted from Professor Turner's economists of confused thought, crude reasoning, and quite absurd conclusions. There is a marked absence of scientific treatment, and little desire to arrive at theories of universal application. The object rather seems to be (and it is avowed by more than one writer) to discover a political economy adapted to America. But these writers are not the only sinners in this respect, though economists in other countries have as a rule been less frank.

With one or two exceptions, these early American writers are not professional economists at all. However, as Professor Fetter points out in his introduction, more of them were academic teachers than was the case with the English classical economists. But most were primarily teachers of theology, philosophy, literature, history, law, or natural science, and economics seems to have suffered in the United States at the hands of men whose real business was to give instruction in other branches of knowledge. In this connection Professor Turner points out that among the earlier American professors who taught economics,

"it was not considered necessary to acquire systematic knowledge in this subject" (p. 160). However, it is not only in America, or even before 1880, that economics has suffered through being taught by men who are not professional economists, who regard it as a by-product, and who do not think it necessary to acquire systematic knowledge in the subject.

The writers reviewed fall roughly into two classes—those who believed in Ricardo and Malthus, and those who did not. The believers for the most part seem to have swallowed Ricardian doctrine wholesale, mistakes and all, but in the writings of the heretics, many of whom regard Ricardian economics as a system designed with the object of securing free trade in England, is to be found a good deal of valuable criticism, dispersed amongst less useful speculations. Most of this, however, will be familiar to students of the present day, as much of it has now received pretty general acceptance. Indeed, the main interest of the book lies in the fact that much of the modern criticism of Ricardian teaching was anticipated by early American writers on economics. Tucker, for instance, anticipates many modern criticisms of the theory of value, regards rent as of the same genus as profits, and more than hints at the idea of quasi-rent.

Another point of interest which is brought out is the extraordinary influence of environment upon the development of economic theory. While Malthus and Ricardo were writing in England, where population and the cost of food were increasing, the American writers were living in a country where labour was scarce and land, as they thought, almost limitless. The result is that while the English writers become alarmed at the growth of population, the Americans think that all that is needed for rapid prosperity is an increase of numbers. Thus an author called Everett, who thinks that food increases much faster than population, in criticising Malthus's arithmetical and geometrical progressions, comes to the conclusion that food increases in the progression of 1, 10, 100, 1000, etc., and population in the progression of 2, 4, 8, 16, etc.—an estimate which he describes as moderate (p. 34).

Professor Turner, in the course of his study, has come to one or two conclusions that may be new to readers of THE ECONOMIC JOURNAL. He thinks that on the question of Protection both List and Carey were indebted to a writer called Raymond (1786–1849), and not Carey to List. He maintains that Amasa Walker, contrary to the generally accepted opinion, was not a Ricardian, and from the passages cited seems to establish his point. Again,

from a careful examination of Carey's views on diminishing return, he appears to prove that on this subject at least Carey did not differ so widely from Ricardo as has been generally supposed. The chapter on Carey is particularly valuable. Mill's criticism of Carey is of course well known, but it may not be so well known that Carey could not refrain from swearing like a bargee whenever Mill's name was mentioned (p. 114).

Practically all these American critics of Ricardo held that Ricardo and his school had over-emphasised the differences between land and capital, and they held that land is merely one form of capital—a view which appears to be now gaining acceptance amongst economists. Professor Turner, who is himself a keen critic of the Ricardian theory, has something of interest and importance to say on this point in a useful introductory chapter entitled "Critique of the Ricardian Rent," and in a résumé at the end of the book. In criticising the commonly accepted notion that land differs from capital because it is limited in supply, he writes: "An acre yielding 100 is as great a part of the land-supply as are ten acres whose total yield is 100. The land-power to do the land-work is the supply of land just as the money-power to do the money-work is the supply of money. The land-supply is increased by new discovery of land, by the better utilisation of land, by the increase of transportation facilities that make new lands available, by scientific methods, or the substitution of rich for poor lands, by intensive or extensive utilisation, or by any means which convert potential into effective uses." Clear thinking demands that we distinguish between "the amount of land" and the "supply of land" (p. 200).

Some of Professor Turner's conclusions arising out of his criticism of the Ricardian theory of rent seem, however, decidedly questionable. He appears to regard the rent of land as distinctly part of cost, and claims that all land under cultivation is rent-bearing. "To recognise rent as an element in the cost of production is," he says, "to take the premise from under Ricardo's deduction of a non-shifting land tax" (p. 13). The more usual criticism of Ricardo takes the form of pointing out that he confined his idea of surplus too rigidly to the rent of land, and of showing that other surpluses besides rent arise in industry which do not correspond to any productive services. No real attempt is made to show that all rent is paid for definite productive services, and before the theory can be disproved that a tax on rent cannot be shifted, it must be shown that no part of rent takes the form of a surplus.

The chapters on the various writers dealt with by the author are interspersed with a good many critical notes, which rather weaken the continuity of his account of their opinions. These notes would have been better placed together in the résumé at the end of the book. Otherwise the subject-matter is well arranged, and there is a very complete bibliography.

H. SANDERSON FURNISS

Getting and Spending; an Introduction to Economics. By LETTICE FISHER, Somerville College, Oxford; with an Introduction by Sir WILLIAM ASHLEY. (Collins Clear-type Press: London. 1922. Pp. 206.)

MRS. H. A. L. FISHER explains in her preface to this book—one of a school series edited by Sir William Ashley—that it aims at supplying the elementary outlines or fundamentals of economic theory, in a form primarily intended for schools, but suited also as an introduction to the subject for other independent students and for groups such as Study Circles and Citizens' Associations. She has succeeded admirably in supplying such an introduction for these older students, and for those just past school age or at the latest stage of secondary school life; and she has provided, in a most engaging form, fare for those central and continuation school pupils—surely uncommon under present conditions—who are in any sense ready for the study of political economy. She has contrived to be wholly lucid (especially perhaps in the sections on the working of exchanges and international trade), without "writing down" to the assumed level of an immature or untrained audience.

The book succeeds in making the subject essentially alive, but at the same time avoids an increasing danger for the modern exponent of elementary economics—that of overweighting his statement of theory with illustrations. These abound indeed, but are never in excess. Thus a goat in a back garden, helping to frustrate the machinations of a typical milk-ring, illustrates, in some detail, the relationship of substitution to monopolistic gains; but the author at this point and elsewhere refrains successfully from tempting her readers to lose the wood in the trees. Her students have no excuse for not grasping fundamental principles, and will have nothing to unlearn if they proceed to more detailed and advanced theory. The applications of theory for their benefit, and the illustrations which enliven their path

meanwhile, hold the balance admirably between the interests of the citizen as he or she should be, the intelligent schoolboy, the young college student (especially), and the member of a Women's Institute. If the formal economic studies of some of these readers are not carried much further than this book, they will at least have received the stimulus necessary to induce them to launch forth into the investigation of the " things not seen " in ordinary life, and the correlation of theory and practice, which gives elementary economics permanent value to humble folk (such as most of the citizens of this country) who will never become specialists. It is in its vigorous encouragement to this spirit of economic curiosity, which is, alas ! by no means always aroused by " introductions " to economics, that the special value of this very attractive little book consists. It shows how practical and modern a structure can be raised on foundations to which J. S. Mill in part, at least, contributed.

The usefulness of the book would be increased by an index, and, perhaps, by an appendix containing specimens of some of those economic materials, such as price index numbers and bank returns, with which the student working without guidance finds it hard to equip himself.

C. V. BUTLER

Peking: A Social Survey. By S. D. GAMBLE, M.A., assisted by J. S. BURGESS, M.A. (London: Humphrey Milford, Oxford University Press. Pp. 513 + 25. Price 21*s*. net.)

THIS book is the result of a social survey conducted under the auspices of the Princeton University Centre in China, and the Peking Young Men's Christian Association, and it is hoped that it represents the first of many studies of Chinese cities. Admittedly, the West needs to know more about China and the Chinese, but those who are living and working in the country also need accurate information in order wisely to plan their future actions. That they may get advice and inspiration from works of this kind is possible, though it is probable that the authors in their desire to give the fullest account of their labours have crammed too much into a single volume. Accounts descriptive of Chinese history, geography and government are followed by pages on commercial life, recreation, prostitution, poverty, philanthropy, prisons, religion, and the work of the Church, and in case the reader's appetite be not satiated with this fare, there

are included articles by writers on modes and manners Chinese. It all makes very interesting reading, and detracts but little from the value of the book, since for the student who may desire to confine his study to the more important sections an extensive index is provided.

The pages on education are useful and informative, and help one to understand something of the organisation of educational work in Peking—a most complicated affair. Teaching seems to be in the hands of certain schools, mostly those of the higher grade, and these are financed and controlled—imperfectly, it is true—by a national Board of Education. There is also a local board which is responsible for most of the primary and middle classes. Apart from these Peking has thirteen other Government boards, including eight departments of the Cabinet, the Board of Revenue, the Bureau of Mongolia and Tibet, the metropolitan district, the military guard, and the police. All these have one or more schools in Peking, and none of them has direct connection with either the national or local boards. Then the foreign mission forces run an entire educational system of their own, which commences with the kindergarten and ends with the university. The result is rather quaint, and despite the provision made for teaching, only one in twenty-nine of the children of school age is found to be receiving instruction. The system, however, is there, and given better social conditions much may be made of it.

The problem of poverty is the stumbling-block for China: it is no new one, she has had to face it for thousands of years, and even to-day a large part of her population is constantly "pressing upon the means of subsistence." The country - it is more than a country, it is a continent—has been organised almost wholly on an agricultural basis, and with limited and backward means of communication, entire districts are often faced with starvation and death from famine, flood and drought. The needs of the suffering people are to some extent relieved by two principal systems of charity, one private and the other public. Private charity, the authors show, is specially directed to the poor who are ordinarily found in every district; the Government is the agency for distributing relief to whole districts when private agencies are powerless to render sufficient aid. Relief in the shape of money grants, supplies of grain, and employment on improvement works are the more popular modes of procedure in China, though money is not distributed in the lavish manner common to England at the present time. Indoor relief, as a rule, is not carried out through

Government. As the writers naïvely remark, in some cases institutions have been under the direction of the local official, but this is because he himself personally supplies the funds, and not because of any established Government policy. It is on the Chinese family system that the poor and needy have relied in the past, and must, we fear, continue to rely in the present state of China. The common treasury and the family kitchen make it possible for many families and districts to care for their disabled, aged, diseased and even ne'er-do-well members, though the system does encourage the lazy. Those who have no family to whom they can look for support receive help from the well-to-do families. Clothes, flour, medicine and coffins have been given to those who can establish their status as paupers, while institutional relief has been given in orphanages, widows' homes, soup-kitchens and life-saving institutions established by the gentry. However, with the advent of the Revolution and the establishment of the Republic, the conception of the purpose and function of charity and relief is changing. The Chinese Government appears to be willing to recognise its duties, and is undertaking more and more local and institutional relief; nevertheless, the work is still sadly handicapped by an empty Government treasury, and a prodigal dissipation of resources in the *opéra bouffe* strife that has raged so long between North and South.

The chapters on commercial life are useful, though they contain little that is particularly new for those who have studied the works of H. B. Morse and similar writers. The guild system, which is so marked a feature of business life in China, is well described. Centuries of experience seem to have convinced the Chinese that competition is not fitted to their mode of life. In a country where a man can enter a trade only after an apprenticeship of three years, the mobility of labour is non-existent, and where, as in China, so many people are haunted by the spectre of starvation, it is a tragedy for a man to lose his job. In competition with its fight for trade, the Chinaman envisages lower prices, lower wages, and failure if he has not the resources or ability to meet new conditions. He feels, therefore, that the cost of competition is too high, and seeks safety in combination rather than in competition. This is why the Chinese have developed the guild organisation: they adhere to it in order that business conditions may be stabilised, be the same for all, and be maintained in spite of outside conditions. Hence the control of business is democratic, even though the country through so many centuries has been ruled by autocratic officials.

The points we have touched upon are but few among the many admirable features in a book in which there is little to criticise, though doubtless many readers will not agree with the remarks in the foreword that "China is calling," that the "United States has proudly espoused the duty of protecting China," that "she must, above all, be protected from within." It is no nation's duty to protect China. The foreign Powers may make offers of assistance, but on an ultimate analysis China can only be saved by her own exertions. As that great authority on China, Sir Charles Addis, recently said, it would be otiose to ignore the marks of progress accomplished under the *régime* of the Republic in China. "A beginning has been made with prison reform; torture has been banished from the courts of justice; the press has been freed; there were 62,000 Government schools open in 1919; the women of China have been relieved of the degrading practice of foot-binding; opium has been banished from the country, and not even the recent lamentable recrudescence of opium-growing in some of the Provinces can dim the ethical value of the original act." One cannot despair of a country which has shown itself capable of rising to such moral heights. It needs but honesty and intelligence at the head of affairs in China to raise the country to a high place among the nations of the world.

W. F. SPALDING

Psychologie des primitiven Menschen. (Psychology of Primitive Man.) By RICHARD THURNWALD. (München: Reinhardt. 1922. Pp. 175.)

OBSERVATION of primitive peoples shows the importance of psychic conditions, of technique and of political features for the evolution of economic life. Moreover, this book of a learned economist and well-known ethnologist proves how different primitive economics are from ours, and that the behaviour of primitive men is essentially determined by their poor technique.

They lead an independent life in small clusters. Their most dominant necessities, food and habitation, are cared for directly and individually (though work is frequently performed in common). But even primitive men strive not only for the bare trivialities of existence; luxury is as old as man, and the possession of objects of luxury means social distinction. The desire

for such distinction or the imagined association with supernatural powers inspires value into a great number of objects, which have little or no direct bearing on the exigencies of material life. Often these very objects become tokens of value (as, for instance, shell-moneys, beads, "precious" stones, and so on). There is everywhere and at all times something in men that aims at things beyond mere utility, and this striving may be one of the most important instruments of progress.

But economic evolution is connected also with *political* processes. The invention of slavery, the dependent condition of ravished women and of children, enabled their lords to cultivate by their aid larger areas, to earn richer crops and to expend greater revenues. In general, economic thought has been developed by the process of making others work; the client class was compelled to strain itself for the payment of tributes. The power of spending of the ruling class is also of the greatest importance for the separation of castes and professions.

A wider area of domination guaranteed a larger population in peaceful relations, extending their *connubium* and *commercium*, and a more advanced technique contributed to the possibilities of transportation and to their commercial intercourse.

Prof. Thurnwald gives not only a valuable exposition of the invention of tools and instruments but also a vivid description of the whole mentality of savage peoples. Many illustrations enliven his well-written book.

E. SCHWIEDLAND

Histoire de Rome de 1354 *à* 1471. By E. RODOCANACHI. (Paris: Auguste Picard. 1922. Pp. viii + 520.)

THE author, who has written a series of valuable studies on Rome and Italy in the Middle Ages and the Renaissance, has always paid due attention to the economic side of history. The French Academy has rewarded with a prize his two volumes on *Les Corporations ouvrières à Rome depuis la chute de l'Empire Romain* (Paris, 1894). In the present volume Mr. Rodocanachi teaches us a good deal about the finances of the Popes in the middle of the fifteenth century. The sources of revenue relied mainly on indirect taxation, inheritances from bishops and priests of whom the Holy See was considered as the legitimate heir, fines and more or less free gifts. Tithes were collected for the then very frequent war expenses. But very often the expenditure

exceeded the revenue and the Popes had to have recourse to loans. These were at short date and the treasures (mainly the gems) of the Church were to be given as guarantee. As Roscher has already pointed out, in those ages there was not yet any substantial difference between public and private credit.

The author gives also some particulars about the economic conditions in Rome. They were even worse than the financial.

A. ANDRÉADÈS

NOTES AND MEMORANDA

The Mathematical Economics of Professor Amoroso

Lezioni di Economia Mathematica. Luigi Amoroso. (Bologna: Zanichelli. 1921. Pp. 478.)

The high reputation earned by the Italian school of mathematical economics will be enhanced by this publication. Professor Amoroso appears to especial advantage when dealing with that part of economics which is most amenable to mathematical treatment, the theory of value. He restates felicitously the relations of value to utility. He smooths and straightens the path struck out by the pioneers, Gossen, and Jevons, and Walras. He presents in juxtaposition the two views of the subject which we might distinguish as hedonic and economic. According to the first view there is a function which represents and *measures* the satisfaction derived from a certain quantity of commodity considered as the variable. According to the second view the function is only an *index* increasing with the increase and decreasing with the decrease of satisfaction, but not measuring that subjective quantity. According to both views there exist very generally functions such that the differential coefficient of the function with respect to a variable, say x, representing the amount of a commodity, divided by the corresponding differential coefficient for another commodity y, represents the value of x in exchange for y; the price of x, we may say, if y is the monetary substance—that is, supposing that there is fulfilled a certain condition purporting that purchasers of x will have obtained as much as they demand at the price. As a simple form suited to act as a representative of "ophelimity," or at least as an "index-function," Professor Amoroso uses cx^a, where c is a positive constant and a is a positive proper fraction. There is then fulfilled the primary condition that the function should increase with the increase of the variable. There is also fulfilled the supplementary condition above referred to, since $ca(a-1)x^{a-2}$ (the second differential coefficient) is negative. The function may involve more than one variable. Professor Amoroso instances $Ax^a + By^\beta + Cx^ay^\beta$. Here the first differential coefficients with respect to x and y correspond to the respective prices;

and two supplementary conditions are furnished by the second differential coefficients. Here we interject a query: Is there not required a *third* supplementary condition to make sure of economic equilibrium? Say x and y denote respectively quantities of bread and beef. The two supplementary conditions stated by our author (page 86) secure that, the consumption of beef being supposed fixed, the purchasers of bread will obtain just what they demand at the price; and likewise, if the supply of bread were fixed, that the purchasers of beef would be satisfied. But is it made sure that the purchase of *sandwiches* of the form $\lambda x + \mu y$ (where λ and μ are any positive constants)—the concurrent consumption of the two commodities—will come to a stop when x and y have the values above determined? Professor Amoroso, a distinguished mathematician, does not need to be reminded that in order to secure a true maximum for a function of two variables, there are in general *three* conditions which must be satisfied by the second differential coefficients.

After fully and clearly describing the "equilibrium of the consumer," Professor Amoroso goes on to the "equilibrium of the producer." He makes good use of a construction which he names the "curve of unitary costs"; unitary cost being the total cost of production divided by the amount produced. The construction is much the same as Professor Pigou's "curve of marginal production." It is much required when we are dealing with the case of decreasing costs (increasing returns). In this connection we note that Professor Amoroso defines decreasing costs by the condition that the *unitary* cost is decreasing. Some might prefer to take as the essential attribute of increasing returns the decrease of *marginal* cost. But all must agree that Professor Amoroso's statement contrasts favourably with that of literary economists who often leave it uncertain whether they mean unitary or marginal cost (Cp. ECONOMIC JOURNAL, Vol. XXI, p. 293 *et seq.*). The charm of lucidity, indeed, pervades our author's work. Very clearly he distinguishes the *régime* of monopoly, in which the producer is free to vary the price, and the regime of competition, in which the producer can only vary the quantity which he will supply at the given price. What price the monopolist will fix is investigated on the lines of Cournot. There are some interesting deductions concerning the displacement of the "Cournot point" to the detriment or benefit of the consumers by means of a tax or bounty.

Beyond this stage we are unable to follow the author's investigation of monopoly, when he extends to the case of two mono-

polists the reasoning which he had applied with success to the case of one. This extension appears to us illegitimate, for reasons which have been stated in the articles on Monopoly in the *Giornale degli Economisti* for 1897. We shall here direct our objections to the example given by Professor Amoroso (p. 258). He supposes the law of demand for a certain commodity to be such that the quantity x is demanded at the price

$$(a)\ 450/(2 + x),$$

(the sloping line signifying division). The commodity is supplied by two competing monopolists, Primus and Secundus, who produce it under similar conditions. The cost to Primus of producing y is

$$(b)\ 30y - y^2 + \tfrac{1}{4}(y - 5)^2(y - 8)^2.$$

And likewise the cost to Secundus of producing z is

$$(c)\ 30z - z^2 + \tfrac{1}{4}(z - 5)^2(z - 8)^2.$$

The quantity at any time supplied being the sum of the amounts supplied by each producer, we may put $y + z$ for x in the expression (a) for the price. We have thus for the net profits of Primus and Secundus, respectively,

$$(d)\ y450/(2 + y + z) - (30y - y^2 + \tfrac{1}{4}(y - 5)^2(y - 8)^2).$$
$$(e)\ z450/(2 + y + z) - (30z - z^2 + \tfrac{1}{4}(z - 5)^2(z - 8)^2).$$

Accordingly, argues Professor Amoroso, Primus will vary y so as to make (d) a maximum; and likewise Secundus will vary z so as to make (e) a maximum. Whence we obtain two simultaneous equations:

$$(f)\ 450(2+z)/(2+y+z)^2-30+2y-\tfrac{1}{2}(y-5)(y-8)(2y-13).$$
$$(g)\ 450(2+y)/(2+y+z)^2-30+2z-\tfrac{1}{2}(z-5)(z-8)(2z-13).$$

The solution of this system determines the position of equilibrium, which is accordingly attained when Primus supplies 5, and Secundus 8.

This procedure appears to s inappropriate to pure monopoly. It might be appropriate to a kind of *kartel* in which each producer is free from time to time to alter the amount of commodity which he puts on the market, the price being allowed in the interval between such changes to accommodate itself to the total supply. But this convention appears unduly to limit the characteristic freedom of the monopolist to vary price. If Primus were an alert business man, he would not acquiesce in an

arrangement according to which his rival made a profit 64 while he himself, producing under equally favourable conditions, netted only 25 (as follows from substituting 5 and 8 for y and z, respectively, in both (d) and (e)). Primus would "cut" the price, charging instead of 30 (the price when $x = y + z = 5 + 8 = 13$) $30 - \kappa$; where κ is very small, just large enough for Primus to draw off from his rival as much custom as he likes. How much will he like? The amount which it will be most advantageous for him to supply is that value of y which maximises

$$(30 - \kappa)y - (b)\,; \quad i.\,e.\ (h)\ y^2 - \tfrac{1}{4}(y - 5)^2(y - 8)^2 - \kappa y.$$

Proceeding as usual we find that this expression is (or would be if κ were zero) approximately a maximum when $y = 9{\cdot}444$. The net profit of Primus will therefore be

$$9{\cdot}444(30 - \kappa) - 9{\cdot}444.30 + 9{\cdot}444^2 - \tfrac{1}{4}(4{\cdot}444^2\,.\,1{\cdot}444^2)\,;$$

that is, all but 79—an improvement upon 25! Meanwhile, Secundus will have lost a great part of his custom, which will be reduced in the ratio of $8 : (13 - 9{\cdot}444)$. If to this residue he supplies, at the price 30, what it demands at that price, viz. $3{\cdot}556$, he will make a profit of about $2{\cdot}35$! Faced thus with the loss of custom and profits he will no doubt cut the price anew. Primus will retort; and thus the price will be continually lowered. Conceivably it might descend to a figure at which each monopolist, or rather the one who has made the last cut of the price, say Primus, will earn next to nothing. This limit is found to be in the neighbourhood of $21{\cdot}5717$. For in general corresponding to any assigned reduction, κ, from the original price 30, the value of y which is most advantageous to Primus, is that which maximises (h). Accordingly, when $\kappa = 8{\cdot}4283$, the best that Primus can do for himself is to put about $8{\cdot}97$ on the market. But that best is very bad; for, with the said values of κ and y, (h) reduces to $1{\cdot}15$! At this stage it may be thought that equilibrium will have been reached. But this would only occur in the particular case where at the limiting price one of the monopolists can supply the whole demand of the market. But this is very far from being the case in the example before us. At the price $21{\cdot}5717$ the demand of the market, found by equating (a) to that figure, is nearly $18{\cdot}89$. Thus Primus supplies a little less than half the total demand. One might suppose that when Primus announced the price $21{\cdot}5717$, his establishment would be besieged by a long queue, of which only about half could be satisfied. The remainder would turn to Secundus, who can satisfy the greater part of them on the same terms. But it will occur to

Secundus that, as he is indispensable to the unsatisfied "tail" of Primus' queue, there is no necessity for him to adopt Primus' terms. Why not fix a price more advantageous to himself? The price that is most advantageous under the circumstance may be found thus. According to (*a*) x, the amount of commodity that would be absorbed by the full market consisting of all possible customers at any price p, is $(450 - 2p)/p$. The amount, then, that will be absorbed by the portion of the (homogeneous) body of customers with which Secundus has now to deal is to x : : as (18·89 — 8·97) : 18·8607; say, 1 : 1·9. Whence $p = 450/(2 + 1{\cdot}9z)$. Therefore the net profit to Secundus from the output z

$$= (i)\ z450/(2 + 1{\cdot}9z) + z^2 - 30z - \tfrac{1}{4}(z - 5)^2(z - 8)^2.$$

The value of z which renders this expression a maximum is found to be approximately 3·9. Substituting this value in (*i*) we find the net profit of Secundus to be about 80. His price will be about 47·8. Primus will certainly not be content to make only 1·15 while his rival is making 80. Primus will fix a price a little below 47·8, and so draw off custom from Secundus. Secundus will retort with a fresh cut; and so the price will again descend, again to mount.

It is to be understood that the details in this illustration have been filled in to "fix the ideas," as the mathematicians say. Thus we need not assume that Primus after the cut which brought the price down to 21·5717 satisfied completely a minority of the market, while the majority—the "tail" of the queue which the lowered price attracted—went away empty. It comes to the same if Primus partially satisfied a majority. Nor is it to be supposed that the price will really be beaten down to the limit at which profits vanish. Long before that limit is reached one or other of the monopolists will ask himself whether it would not be more profitable, instead of cutting his rival's price, to raise the price on the customers left to him. Suppose, for instance, that the price has been beaten down (from 30) to 25·208, the last cut having been made by Primus; at that price the amount which Primus will find it most advantageous to put on the market (as determined from (*h*), κ being now 4·792) will be 9·2. Accordingly, the net profit of Primus will be 34·2. Secundus may count on a profit only slightly less than this if he cuts the price. The advantage of the alternative course is thus reckoned. Whereas (by (*a*)) the amount demanded by the whole market at the price 25·208 would be 15·85, the "tail" of custom left to Secundus when Primus has supplied 9·2 is to the whole market as 6·65 is to 15·85, say as 1 : 2·38. It is proper therefore to sub-

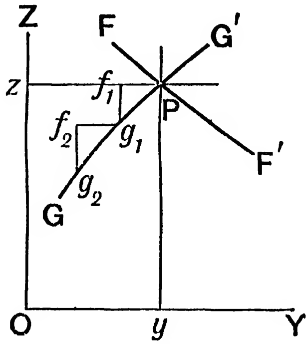
stitute 2·38 for 1·9 in (*i*). Proceeding as usual we shall find that the value of z which maximises the expression thus presented is approximately 3·7, corresponding to price 41·6, and net profit nearly 49. It will be more profitable, therefore, for Secundus to withdraw from the direct competition and deal separately with the customers left to him by his rival's last cut. But it is not certain that Secundus will raise his price to the theoretic height of 41·6. Practical considerations may induce him to make a less violent jump. For Primus it will then be a matter for deliberation whether he should cut the price fixed by Secundus, or, jumping to a still higher price, deal separately with the custom left to him by Secundus. We cannot foresee what the jumps will be; theory predicts only that the jumping will go on for ever, as long as the monopolists are uncombined.

We should give judgment in this matter against Professor Amoroso with more confidence if he had not appealed to Professor Pareto. We have not seen the note by Professor Pareto to which our author makes reference (p. 260). But from the writings of Professor Pareto with which we are acquainted we do not gather that he differs seriously from the conclusions reached in the article on Monopoly to which we have referred. He indeed raises the nice question whether from a mathematical point of view it is proper to describe as "indeterminate" a position which is too much determined, there being more equations than unknowns. But that is not to dispute the statement that there is not a "determinate and definitive" position of equilibrium (Giornale, *loc. cit.*, p. 22), not the same sort of stability in duopoly as in monopoly and in perfect competition. We believe that Professor Amoroso is alone among high authorities in siding with Cournot in this matter. The view that in monopolistic competition "the output is indeterminate" . . . "is now commonly accepted," says Professor Pigou; and, he adds, "appears to me to be the correct one" (*Wealth and Welfare*, p. 193).

Altogether our author's teaching about duopoly cannot be regarded as part of accepted science. We should recommend the omission of this topic, if it were proposed to translate the work into English with the view of supplying the much-felt need of an introduction to mathematical economics. If excision were permitted, we should also advise pruning the redundancy of digressions. It is disconcerting to a beginner to encounter at the ninth page a digression of ten pages on the determination of the present value of national capital. Herodotus was not more fond of digressions. But the father of History is not so good a model in this respect as the father of Political Economy,

whose classical Digressions are few and far between. We speak in the interest of tiros. For the mature student our author's digressions are good reading. The same may be said, indeed, of the disputable passages which we think unsuited to beginners. It is good to consider views different from our own presented with ability and perspicuity.

As a second example of the last-named advantage, we shall refer to our author's treatment of the cases in which two or more monopolists produce each a *different* article. Professor Amoroso applies to this case the same reasoning as he had applied to the case of the *same* article produced by two monopolists. The reasoning is more plausible when the different articles are *complementary*. This case is not well illustrated by Professor Amoroso's example. For there is a *singularity* in the data instanced by him



which render them unsuitable for a simple representation of the *general* theory. In general it may be presumed that the curves corresponding to (f) and (g) above *intersect* at the point which they have in common. Consider, for instance, in the annexed figure, the curves FF′ and GG′. Here FF′ is the locus of points such that if Secundus supply any assigned quantity Oz of his commodity, the quantity Oy which it will then be most advantageous for Primus to supply is determined by the intersection of a horizontal through z, with the curve FF′. The curve GG′ likewise determines the ordinate z corresponding to any assigned y. If then P is the intersection of the two curves, it would seem that neither party has an interest in moving from that position. It is not now, as before, the interest of Primus to lower his price. By so doing he would only diminish his own profits while increasing the profits of the other monopolist. Nevertheless, it is not against his interest to move a *little* way from P on the horizontal through P; although—or rather, just because—P is a

position of maximum. Suppose, then, Primus moves to f_1. It will then be the interest of Secundus to lower his supply to g_1. It will not now be the immediate interest of Primus to move again to the left. But if he does so, it is likely to prove advantageous to him, since Secundus will then descend to g_2; and it is in general advantageous to Primus to descend *some way* on the curve GG′ (cp. Giornale, *loc. cit.*, p. 26, where the argument is not affected by the difference in the slope of the curve corresponding to GG′, nor by the circumstance that the curves there relate to prices and here to quantities). No doubt this excursion must come to a stop. But then Secundus may initiate a similar deviation.

And there will go on vibration inconsistent with that determinate equilibrium which is characteristic of pure competition. So far supposing that the different articles are *complementary*. A fortiori if the articles are *rival* or, in Professor Amoroso's phrase, "supplementary." For then there are superadded to the dance just now described the leaps and bounds before exhibited. If Primus is the purveyor of beef and Secundus of mutton they will go on making moves against each other very much as if they were producers of the same article. Accordingly, we cannot, with Professor Amoroso (p. 418), regard the regime in which every industry is monopolised as comparable in respect of equilibrium with a regime of pure competition. The determinateness which theoretically exists in the latter case is theoretically absent in the former.

Again, we are unable to accept Professor Amoroso's views about Protection. He seems to think that there is on balance of pros and cons no general presumption in favour of Free Trade. "On the contrary, it is particular historical circumstance varying from time to time and from place to place that require the adoption sometimes of one solution, sometimes of the other, most frequently of a solution between the two" (p. 322). In the scales of our judgment the two policies are not so evenly balanced. Nor are we convinced by the "equations which represent that profits are zero" (p. 408; cp. p. 178). No number of equations or authorities will persuade us that this doctrine is other than paradoxical.

But while differing from our author on some cardinal points, we recognise that he has evinced great ability in defence of positions which we regard as indefensible. If they were defensible,

"Si . . . dextrâ
Defendi possent, etiam hâc defensa fuissent."

F. Y. EDGEWORTH

The Safeguarding of Industries Act

ORDERS UNDER PART II

The Safeguarding of Industries Act was introduced and passed because it was commonly believed at the time that Great Britain had to fear an outburst of economic energy on the part of Germany. The popular view is well expressed by the following extract from the official Coalition magazine of July 1921:—

> "Mr. Baldwin carried the House with him as he proceeded to show that the real purpose of such a measure lay in the desire of the Government to be faithful to its trust by taking effective steps to protect employment in the country in the face of the certainty of still fiercer competition on the part of Germany in the future."

As we now know, these fears have not been realised. Indeed, so long ago as last Christmas well-informed observers knew that things would happen otherwise. Sir Robert Horne on the 22nd November last, speaking on the Reparation problem, said "there were practically only two subjects of production in which Germany was even approaching her pre-war exports—namely, electrical machinery and toys—and it could not be truthfully asserted that Germany had done any real injury to our trade" (*The Times*, 23.11.1921).

The true present position was accurately described by Mr. Asquith in his speech in the House of Commons on the 31st July last:—

> "Of 123 applications, the residuum is only four, which have gone through the meshes of the net of the Board of Trade and are now submitted to the House. What becomes of the outcry against dumping founded upon a depreciated exchange? It is reduced to insignificant and even contemptible proportions."

But though the anticipated danger has never appeared the machinery for meeting it has not been left idle. What has actually occurred is that some small and well-organised industries, which had profited by the isolation of the home market during the War and naturally felt the effect, small though it was, of the renewal of continental supplies, have been able to persuade the Committees set up under the Act that they could satisfy the conditions required for a Tariff.

Before examining what those conditions were it is well to look at the powers and procedure of the Committees themselves.

Clearly if the expected events happened and the spirit of the Act was to prevail, those bodies had before them research unusually extensive and intensive, as was freely emphasised when their proposed constitution was the subject of debate.

First of all, how was the personnel to be provided? Liberal pressure in the Cabinet was successful in extracting an understanding, which was privately given, that the consumers' interest should predominate. In *The Times* of the 7th May, 1921, the following passage appeared:—

> "What those present regarded as definite guarantees were given by the Prime Minister, namely"--

(The first two assurances are immaterial.)

> "(3) That the administration of the duty will be in the hands of a Committee consisting mainly of consumers. . . ."

Naturally disquiet was allayed by this promise, but it is hard to see how the actual machinery fulfils it.

What of the information laid before the Committees and their powers of sifting it? The first point to note here is that official statistics on the material points were not forthcoming. To specific questions which would have given the House of Commons sufficient information to make an independent judgment on the issues involved, the Board of Trade were bound to return the answer that they themselves had not the necessary figures. They referred the questioners for information to the Reports of the Committees of Inquiry. On what were these based? Partly upon confidential documents. This was to be expected. Traders were not anxious to reveal more of their secrets than could be helped. Let me quote one extract from the shorthand notes of the Hollow-ware Inquiry:—

> Mr. Faraday: I have copies of these figures if the Committee would like them?
> The Chairman: Yes.
> Mr. Artemus Jones: If they are not confidential I should like to have a copy.
> Mr. Faraday: They are confidential and for the convenience of the Committee, *not for the information of the Opposition.*

If such *ex parte* evidence was to be tested at all it could only be done by cross-examination. But this was not allowed

> "A witness whom the Committee desire to hear may, if he wishes, be accompanied by solicitor or counsel who may address the Committee on his behalf, but no witness shall be examined or cross-examined by the Members of the Committee."
> —Statutory Rules and Orders, 1922, No. 90.

A comment, also taken from the shorthand notes of the Hollow-ware Inquiry, shows that the judges themselves felt the handicap under which they suffered:—

> Mr. Artemus Jones: Precisely. You are actually asked to make a grave recommendation like this to the Department upon a casual observation made by one gentleman in the trade. It may be inaccurate; it has not been tested; it has not been investigated.
>
> The Chairman: I have felt all through that if you and Mr. Faraday had cross-examined the witnesses we should have had a very much easier task.
>
> Mr. Faraday: I should have liked the chance.
>
> Mr. Artemus Jones: I am glad to hear you make that observation, Sir, because it will go down on the notes, and if an Order is made by this or some other Committee, no doubt it will be noticed in the House of Commons.
>
> The Chairman: That is not a question for us here. We need not discuss it. I frankly say that I have thought it a great disadvantage.

* * *

And now as to the questions to which the Committees had to find answers. I will not arrange them in the somewhat complicated order nor impose the limited scope of the Statute, but will put them as four plain conditions which the man in the street would naturally ask should be satisfied before a duty was imposed in a country still avowedly free trade in practice and only utilising tariffs as a temporary necessary expedient.

The four questions are:—

Firstly: Is the home industry efficiently conducted?

Secondly: Are the competing foreign goods really being sold at a dumped price?

Thirdly: Is this the result of the depreciation of the foreign exchange in question?

Fourthly: Will the result of an Order be on the whole to safeguard employment in this country?

Let us ask how the tests were applied and with what result.

The first is, Is the industry efficiently conducted? What is meant by efficiency? Does it mean that the factory complies with the Home Office regulations and that the standard of production is good? If it merely means this, any ordinary manufacturer might pass. But what of the natural advantages of the place of manufacture? What of the acquired aptitudes of the workmen? What of those subtle qualities of the product which make it marketable? Are not these also ingredients of true efficiency? Indeed, when we ask what is the test to apply there can surely be but one answer, namely, the test of the market.

What is efficiency in business except the power to make a profit, and how can a profit be made unless the public can be induced to buy the product at a price more than sufficient to cover the cost of manufacture? This really searching question was not fully put by the Committees. They looked at the aluminium ware, they looked at the gloves, and came to the conclusion that they were well made. They were not at the sale counter, they were not the public asking themselves whether they would buy the goods, but were applying the artificial test, "Is this a good article which the public might reasonably buy?" Consider these sentences in the Report on Aluminium ware. They spoke of German articles as "admittedly almost entirely of the inferior grades." But they happened to be what the public wanted. They explained that the mass of the British population preferred to buy the German article "because it is cheap even though in the long run the stronger and more durable English article may give better value for the money." But who can be judge of the suitability of an aluminium pot except the buyer? He may prefer a thin pot in place of "a stronger and more durable" one because he finds less heat is required to boil the kettle. He knows what he wants, and the test of efficiency is the power to supply it. The case of gloves is even clearer. Sir Henry Rew's Committee came to the conclusion that the makers appear to be "carrying on the manufacture with reasonable efficiency and economy and in most cases are maintaining a standard of production equal to that of any foreign competitor." That may be a perfectly fair opinion *in vacuo*, but the market view is different. One witness who dealt in English gloves said:—

> "I have known my customers come in and walk out again without buying the English goods. The British public prefer the German article. I stuck to the English manufacturers for a time, and if I had not gone to the German manufacturers, I should have been out of the market."

And another gave evidence even more illuminating:—

> "Many men have tried who are not really glove manufacturers; they have tried to produce an article which was out on the market. The buyers bought it, and naturally they thought it was a saleable article, but to their cost they made only big losses. In the early part of 1921 we held a meeting of buyers and manufacturers, and the buyers very loyally stood round and told the British manufacturers they would gladly put up all the samples so as to give them fair play and every encouragement. The samples have gone forward, and the results have been, I should say, 80 per cent. Saxon orders and 20 per cent. English. German competition,

I contend, would have helped the British manufacturer: it puts them on to produce efficiency."

Incidentally a witness explained that another protective experiment—that in dyes—was having its effect, and that the British article was handicapped on account of the compulsory use of British colours.

The second question is, Are the foreign goods being sold at really dumped prices? The definition in the Act is, to say the least of it, naïf. The test price is one which is lower than that at which similar goods can be profitably manufactured in the United Kingdom. As the only evidence to work on is the evidence of the British maker it is hard to see when the datum line will ever permit free importation from abroad. The less the competition the less the need for inventive economy. The less the economy the higher the price at which the articles can be profitably manufactured. And again, assuming catalogue prices to be made the test, what period is to be taken? Is it to be the artificial war price or the pre-war price? Obviously the pre-war price. Judged by this test the fabric glove Order fails, for German prices to-day are about $2\frac{1}{2}$ times higher than pre-war, while English prices are only about twice as high.

This leads us to the third question, namely, Whether it is in fact the depreciation of the currency which is responsible for the low selling price?

Before Part II of the Act can be applied it is necessary for the Committee to find as a fact that the goods in question are being sold or offered for sale in this country at prices below those at which similar goods can be profitably manufactured in this country, and that this has been brought about by the depreciation of the currency of those countries in relation to sterling. Or, as Sir John Barran puts it in his minority report on the Domestic Illuminating and Mounting Glassware case (p. 12)—

> "It is not enough to prove that the prices of certain foreign goods are exceptionally low *now*: it must further be shown that in past years also, before ever exchanges fell, these same goods were not in fact low enough to take the trade . . . nor again is it enough to prove a percentage degree of unemployment now in a particular group of employees: it must further be shown that it is the goods imported under a depreciated currency, those and no others, which have caused this particular unemployment."

It would be natural to expect, in the case of glassware, for instance, that the comparative figures for 1913 and 1920 would show a great increase in German and Czecho-Slovakian imports,

which would, owing to their cheapness, have killed not only the home industries but also the imports from other foreign countries with a normal exchange. This is not the case, as the following table, compiled from the Board of Trade Annual Statement, proves.

	Germany.	Belgium.	Sweden.
1913. Imports of "glass, Flint, plain cut, or ornamented, and manufacturers' Flint glass, except bottles"	936,917 cwt.	241,574 cwt.	114,808 cwt.
1920. "Globes and shades other than oil lamp chimneys." ..	24,074 cwt.	1,001 cwt.	28,912 cwt.
"Domestic and fancy glassware (including cooking utensils, table glassware, ornamental glassware")	92,724 cwt.	206,921 cwt.	20,674 cwt.
Total for 1920	116,798 cwt.	207,922 cwt.	49,586 cwt.
Normal Exchange 1913	20 marks	25·22 francs	18·15 kronen
Average Exchange 1920	227 "	49·02 "	17·75 "

It would also be reasonable to expect that as the exchange rose and fell in foreign countries so would the volume of imports rise and fall. It is possible to compare the figures of imports of domestic glassware in 1920 and 1921 when the exchanges of Germany and Czecho-Slovakia moved in a downward direction. In the following table the quantities are taken from p. 14 of the Report on Glassware. The exchange is arrived at by taking the quotation at the beginning of each month in *The Times* and averaging it over the year.

English output and foreign imports for 1920, 1921 compared.

Domestic Glasswr	1920.		1921.		Percentage increase or decrease.
English output in maximum year 1920 (see Report, p. 14) ..	£356,000		£214,000		40% decrease
Total foreign imports ..	£2,404,000		£1,402,000		42% decrease
		Exchange.		Exchan;	
Belgium .. .	£892,000	49·02	£594,000	51·60	33% decrease
U.S.A. .. .	£361,000	3·59	£115,000	3·80	68% "
Germany .. .	£515,000	227	£195,000	364	62% "
Czecho-Slovakia	£216,000	233	£335,000	307	55% increase

It is noticeable that English output and foreign imports have declined in almost exactly the same proportion, the advantage being slightly on the side of the home industries. It is manifest that the import from the different countries does not correspond at all closely with the movements of their exchanges. Without attempting in any way to go behind the findings of the Committee who had the advantage of seeing figures and documents which are not available for the general public, it is difficult to come to any other conclusion than that the decreased home output corresponds almost exactly with the decreased imports, and that this was due to the general world trade depression, and that the exchange has very little to do with the matter.

There only remains the final question as to whether employment is being affected, and here in passing we may ask, Does the Act require it to be shown that men are out of work at the time when the Order is made or is it sufficient to show that they were out of work nine months ago when the evidence was collected? One hears that to-day the glove-makers are very busy. "We are very busy working double shifts," writes one, "and your humble servant oftentimes until 10 p.m." Further, what is the datum line of employment? Is it to be the war level or the pre-war level? Production was distorted during the war by Government control. The cotton trade was only allowed to work at 60 per cent. of its power. Agriculture was purposely stimulated. The level of employment in each industry during the war was an artificial one. If, on the other hand, the pre-war level is taken it is seen that there is to-day little unemployment in the glove trade, and the cotton trade is only now regaining its German markets. As a matter of fact, the Statute makes no provision for examining the condition of employment in the cotton trade, nor in the many trades affected indirectly by the other Orders. Were such examination allowed Orders would not easily be made.

It may truly be said, therefore, that the Statute was provided against a flood which never rose; that the Committees were given a task in any case difficult, and impossible to their limited powers; and that in consequence their answers to the four test questions were unconvincing.

WEDGWOOD BENN

Official Papers

U.S. Bureau of Labour Statistics.

No. 285. *Minimum Wage Laws of the United States: Construction and Operation.*

No. 286. *Union Scale of Wages and Hours of Labour.*

[The data for all localities and for all occupations having been separately given, there is formed a general index number showing the movement of wages and hours of work from 1907 to 1920. The rate of wages per week in 1920 was more than double what it was 1907. Full-time hours per week had changed in the ratio of 100 : 91.]

No. 300. *Retail Prices*, 1913 *to* Dec. 1920.

United States Tariff Commission: Colonial Tariff Policies. Washington: 1922. Pp. 869.

The twenty-first Financial and Economic Annual of Japan. 1921. Tokyo.

[This number, like its predecessors, presents a comprehensive view of leading economic interests: finance, agriculture, industry, foreign trade, etc. The great increase of imports in excess of exports is connected with the economic slump which occurred in the latter part of 1920. The index-number for the average price of (thirty-nine) commodities shows a rise from 100 in 1912 to 292 in the first half of 1920; then a fall to 245 in the second half of that year. Index-numbers for wages during the same period are given for forty-four industries separately, but are not combined into an average. By the use of *medians*, however, it may be seen that the rise of wages fully kept pace with that of prices.]

Notes on the Report of the Registrar General (1920)

The annual Report of the Registrar-General of Births, Marriages and Deaths provides a faithful representation of the industrial disorganisation from which the nation is slowly recovering, and the serious trade depression of the last eighteen months is reflected in a heavy decline in the birth-rates as shown in the latest quarterly Report now also published. We must wait, therefore, for a less abnormal year before drawing any conclusions from figures which fluctuate violently in comparison with those of previous years. The broad results are summarised and abnormalities accounted for, wherever possible, in the Report, but a closer scrutiny will amply repay the demographer, and some

widespread misconceptions will be removed. It is most remarkable that the region bounded by the Tyne and the Tees should show the highest birth-rate. The disciples of Malthus may triumphantly apply the *post ergo propter* argument in this instance, but if Nature has been bountiful here she has not been niggardly in Lancashire and the West Riding, and without a full acquaintance of local conditions it is not an easy matter to account satisfactorily for variations in rates of increase or decrease.

The high birth-rate, 25·5 per 1000 population, forced up the death-rate for infants under one year from 12·2 to 16·4 per cent. of the deaths for the year; for infants under one year the rate of mortality was governed not only by the age of the child, but also by the time of the year; thus for all ages it was much greater in the first quarter of the year than in any other. It fell about 20 per cent. in the second quarter, about 42 per cent. in the third, and about 28 per cent. in the fourth. For all ages there is a decline in the death-rate during the second quarter, the third is the lowest for all, in the fourth it rises again, and for infants under two months equals the death-rate for the second quarter. The death-rate for infants under one year was 90 per 1000 births; it was greatest on the first day of life, the rate of which was slightly less than that for the first week. In the second week it diminished by approximately one-half of that of the preceding week, in the third by one-sixth, and in the fourth by one quarter; from the fourth to the twelfth month the fall is approximately one-tenth for every two months. For children in their second year it fell from 3·9 males and 3·1 females per 1000 population in the thirteenth month to 1·5 in the twenty-fourth month for both sexes. The death-rate for infants under one year was lowest in the third quarter, when it was 63 per 1000 births, the lowest *number* of deaths (366) was for infants ten to eleven months old, but this was not so small as the actual *number* of infants aged eleven to twelve months dying in the fourth quarter.

Generally, the highest birth-rate is accompanied by the highest death-rate. After the first week of life the mortality is heavier in industrial than in rural districts. The number of deaths per 1000 births in rural districts, whether in the North, Midlands, South or Wales, always exceeds, for periods under one day or up to seven days, that in county boroughs or other urban districts, but for all subsequent periods the rural districts, in whatever region situate, always have the advantage.

The relative vitality of the sexes varies at different ages. The excess of male births over female is greatest in rural districts,

being 1073 males per 1000 females in the North and 1066 in Wales. It is least in the South, being 1043 in rural and 1050 in urban districts. For the country as a whole, the births of males were 1052 per 1000 births of females, and the deaths under one year were, males 90·02 and females 69·31 per 1000 births respectively; from 0 to five years the actual deaths were 61,200 males and 46,344 females, and thereafter the former declined and the latter increased relatively to each other, until at fifteen years they were approximately equal. From fifteen to thirty-five years the death-rate of males was never greater but more frequently less than that of females; after thirty-five the reverse was always the case.

No definite relation can be established between a high birth-rate and a high infantile death-rate, since Child Welfare Centres are more active in some localities than others, but the following selection of twenty towns having different rates shows that they are usually concurrent:

Town.	Births per 1000 population.	Deaths under one year per 1000 births.
Middlesbrough	33·7	139
Gateshead	33·7	112
Sunderland	34·1	104
South Shields	33·9	121
Barnsley	32·5	131
Darlington	26·2	138
West Bromwich	31·9	109
West Hartlepool	31·9	103
Warrington	29·1	92
Gloucester	27·4	69
Carlisle	26·9	79
York	26·0	63
Coventry	25·5	75
Canterbury	25·3	61
Reading	24·8	65
Wallasey	21·2	72
Oxford	19·7	53
Bath	19·5	53
Hastings	19·3	50
Eastbourne	18·5	58

The distribution of the natural increase of the population is of the greatest interest. Taking the deaths per 1000 of the population from the births per 1000, and disregarding any wastage or accretion due to migration, a rough estimate of the natural increase can be made. These calculations show that the greatest increase occurs in the North and in Wales (urban districts) and the least in the South. Again, selecting populous areas, it is found that the high infantile death-rate does not countervail the high birth-rate and the grouping remains very similar.

Town.	Increase per 1000 population.
Middlesborough	18·1
Gateshead	18·6
Sunderland	18·3
South Shields	16·7
Barnsley	18·0
Darlington	13·6
West Bromwich	17·5
West Hartlepool	16·9
Warrington	16·9
Gloucester	14·2
Carlisle	13·5
York	84·3
Coventry	16·7
Reading	13·8
Wallasey	10·2
Oxford	9·0
Bath	7·3
Hastings	5·0
Eastbourne	8·6

The low position taken by seaside resorts and residential towns is unexpected, and the following towns give surprising figures:

Blackpool	2·9
Southport	4·4
Bournemouth	5·6
Brighton	10·5

The rate of increase in the rural districts over other areas diminishes from North to South; in the Midlands and South it is actually less than in the county boroughs. There is no clear evidence of a decline in the population of towns being compensated by rural increases, and Carlyle's "monstrous tuberosity" is maintained not at the expense of deserted villages, but by recruits from the county boroughs and urban districts. In industrial counties the increase is often greater in the urban than in the rural districts. This occurs in Staffordshire, Nottinghamshire, Leicestershire, Cheshire, Lancashire, Yorks (North Riding), Glamorgan, Monmouth, Cumberland and certain of the Home Counties, *e.g.* Surrey, Essex, Hertford, Berks and Bedfordshire, which no doubt serve as residential centres for Metropolitans. It is not clear why such an increase should be found in Dorset and Rutland. The development of manufactures or commerce leads to the urbanisation of the districts in which it takes place, but the conditions fail to explain why the rural environs increase at a lower rate than the urban districts. It may be that the marriageable section of the community migrates from the country to the town, but although the birth-rate in the former is diminished, that in the town may not be increased proportionately, and it is

with percentage increases, not actual increases, that we are concerned.

The danger attaching to an indiscriminate interpretation of statistics is well illustrated in this Report. The casual reader would be startled to discover that the rural district of Moot Hall and precincts in the County of Northumberland, with a population of four and a birth of one has a birth-rate of 250 per 1000. Again, the mortality per million for persons of eighty-five and upwards has been stated as 235,351 males and 246,117 females. In either case the figures given can convey no adequate meaning, and no explanation is vouchsafed to the uninitiated.

M. H. GEES.

CURRENT TOPICS

THE Annual Meeting of the Royal Economic Society was held at 9, Adelphi Terrace, on June 19th, when the Accounts for the year 1921 were presented, and the President, Council and officers were elected for the year 1922–23. The Secretary presented the following Report :—

	1921	1920	1919	1918	1917	1916	1915	1914
New Fellows and Library Members elected ...	307	228	105	60	52	64	100	50
Fellows lost by death, resignation, or default	21	40	14	41	43	25	43	33
Number of Fellows and Library Members on December 31st ...	1,383	1,097	909	818	799	790	751	694
Life Members included in above total	340	307	232	211	191	179	173	159

The surplus of Income over Expenditure during 1921 amounted to £415 as compared with £741 in 1920, £437 in 1919, and £425 in 1918.

THE following have been elected to membership of the Royal Economic Society :—

Aiyar, A. K. S.
Algie, D. L. (*life*).
Amory, C.
Angus, W. N.
Anthony, A. Bruce
Austin, G. H., Ph.D.
Bhandari, Des Raj.
Cassell, M.
Cherry, J. W.
Clampett, G. J. T.
Consejo Superior Bancario. Madrid.
Cox, A. C.
Cummins, T. J.
Dey, Prof. H. L.
Doddi, M. R.
Dolezal, L. R.
Ellis, A. R.
Evans, E.
Grant, Miss I. F.

Gray, Prof. A.
Hawley, F.
Henderson, Dr. H. E.
Hodges, Frank.
Holden, R. A.
Hooper, H. T.
Hughes, J. McG.
Hulbert, C. G. K.
Indian Economic Society, Bombay.
Isherwood, R.
Janicki, Dr. S.
Jeffery, N. C.
Jones, W. E.
Lockwood, T. B.
Munshi, T. N. (life).
Pearson, D. H.
Perry, W. C. J. (life).
Phillips, H.
Pilkington, L. G.
Pillai, P. P.
Prain, J., Jr.
Ridley, G.
Shettle, Rev. G. T.
Sraffa, Dr. Piero.
Sterzel, E. E.
Stettler, H.
Sundaramurthy, V.
Thomas, P. J.
Thomas, W.
Vaidya, R. N.
Young, W. C.

ONE result of the Conference on Unemployment inaugurated by the President of the United States last year has been the appointment of a Committee to study the subject and report upon practical proposals. Professor Wesley Mitchell is "field director" of the study. The study is part of a campaign against waste in which the Federated American Engineering Societies are taking an active part, as appears from their report on Waste in Industry (to be reviewed in the ECONOMIC JOURNAL). The co-operation of other agencies and organisations encourage the hope that wise action will be taken very soon.

THE Labour Party are to be congratulated on the report of their Committee about Major Douglas' "New Age" credit scheme. To detect fallacy unblinded by the "natural attractiveness of sovereign remedies" is no small part of economic wisdom. *The Committee have attempted something even more difficult*, to discover what useful lessons may be extracted from the scheme considered. The acumen which they display entitles them to an attentive hearing, when they themselves make a proposal for the social control of credit. It is, in brief, the nationalisation of the banking system. The Committee truly observe that the provision and control of legal tender currency is universally admitted to be a State function. But nearly all modern States, even when creating a State Bank, have gone out of their way to take precautions to keep banking functions proper outside State control.

RECENT PERIODICALS AND NEW BOOKS

Journal of the Royal Statistical Society.

MAY, 1922. An investigation of sickness data of public elementary school teachers in London, 1904–1919. J. Y. HART. The mean illness of men teachers was 4·6 days a year; the figures for single and married women respectively, 8·2 and 9·3. The figures vary with age, *e.g.* for men 2·8 for the period 30–40, 9·2 for the age-group 61–65. *Wheat Prices and Rainfall in Western Europe.* SIR WILLIAM BEVERIDGE. A supplement to the article on Weather and Harvest Cycles in the ECONOMIC JOURNAL for December 1921. The "periodogram" of wheat prices yields many interesting results concerning cycles. *Molecular Statistics.* F. Y. EDGEWORTH. *Resumé* of an article published in the Philosophical Magazine, Feb. 1922. *Note on a heterotypic Frequency Distribution.* CAPTAIN J. W. BISPHAM. The utilisation of a larger number of terms of the fundamental differential equation from which Prof. Pearson's "types" are derived does not much improve the fit to heterotypic distribution.

Economica.

JUNE, 1922. *Who said "Barren Metal"?* PROF. E. CANNAN and OTHERS. A symposium on the question whether when Aristotle said that money begot money, he could have meant that it was "barren." *Legal Aspects of the Trade Union Movement in the U.S.A.* W. F. CRICK. *Early Commercial Intercourse between England and Germany.* A. WEINER. *The British Iron and Steel Industry.* M. S. BIRKETT.

Manchester Guardian Commercial.

Reconstruction in Europe.

Section IV. As announced in the Current Topics of the June number, the fourth section of this series deals with Russia. Mr. Keynes, the Editor, in an introductory article reflects on the causes and consequences of the Russian revolution. He has no admiration for the rank and file of the Communist doctrinaires, whose "woolly conceptions" sheathed the steel of Lenin's superior intellect. He views with concern the annual addition of more than a million labourers; due to the rate of birth and survival prevailing many years ago. Herein he differs from Mr. Strumilin, who welcomes the swelling body of ever more numerous workers, in an article which forms one of a series contributed by the principal officials of the Soviet Republic. The reader may correct their views by reference to a number of articles in which Russia is viewed from outside. Mr. Keynes has called attention to those of Lord Robert Cecil and Signor Orlando. There are three articles on the Russian Famine—one by Nansen.

Section V. This section deals with *National Finances of Europe*, *Tariff Hindrances* and *La vie chère*. The Editor prefaces with an article on *the inflation of currency as a method of taxation*; and subsequently exhibits *the influence on Society of changes in the value of money*. He laments "the impoverishment of the middle class, out of which most good things have sprung. The consequences may slowly accumulate in a decay of Knowledge and Art." It would be impossible here to enumerate the studies in which experts deal with the finances and tariff policies of the European countries. Mr. Sidney Webb advocates the financial policy of the British Labour Party—a capital levy— as "based upon an unswerving adhesion to the principle of honesty in financial relations," and "what the best economic science advises."

Section VI. *Population: Agriculture and Food Supply. The Peasant Revolution in Europe.* This section reaches us too late to admit of its adequate notice in our September issue.

The Irish Economist (Dublin).

MAY, 1922. *Labour in Ireland.* G. D. H. COLE. The comparative virgin soil which Irish Trade-Unionism enjoys is favourable to its organisation not merely on traditional lines as a protective instrument, but "on the twentieth-century principle of workers' control." *The National Land Bank.* DIARMID COFFEY. Founded under the auspices of Dáil Eireann, this Bank lends money to co-operative societies formed for the purchase of land, to be afterwards subdivided among owners. The borrowing society deposits one-fourth of the purchase price with the Bank; which has also the security of a mortgage. Loans totalling £370,000 have been made since 1920 for the purchase of 16,500 acres. The Bank also does ordinary banking business. Mr. Lionel Smith-Gordon is the Managing Director. *The Irish "Woman with the Basket."* MARGARET MCCOUBREY. Referring to Miss Llewelyn Davies' recent article, the writer hopes for a Co-operative Womens' Guild more efficient than the present organisations.

AUGUST. *A Commercial Policy for the Free State.* A. J. CRICHTON. The policy of the Free State should not be free trade. But "anything in the nature of Stiff Protection had better be avoided for the present." *Co-operation in Russia. I.* R. MICHAEL FOX. *With Irish Women Workers.* LOUIE BENNETT. The writer's experience as a promoter of Women's Trade-Unions in Dublin have led her to believe that women attach more importance than men to *conditions* as distinguished from wages. She recommends separate feminine Unions; which would insist on humanising conditions to an extent not realised even by employers of the Cadbury and Leverhulme type. Even under the control of the workers industry might remain "a soul-destroying mechanism without the distinctly feminine outlook."

International Labour Review (Geneva).

JUNE, 1922. *Tendencies in Trade Union Development in the United States.* JOHN R. COMMONS. *The Social Insurance Bill of the French Government.* GABRIEL C. RAMON.

JULY. *The Christian Social Movement.* PROF. MAX. TURMANN.

AUGUST. *Types of Co-operative Societies.* H. KAUFMANN. *The Guild Movement in Great Britain.* G. D. H. COLE.

Quarterly Journal of Economics (Cambridge, Mass.).

MAY, 1922. *International Trade Under Inconvertible Paper.* J. W. ANGELL. *A Theory of Profit and Interest.* L. KOTANY. *Ethics and the Economic Interpretation.* FRANK H. KNIGHT. *German Foreign Trade and the Reparation Payments.* J. H. WILLIAMS. Germany's experiences throw light on the theory of foreign exchange under a *régime* of paper money. The causal sequence is said to be as follows: reparation payments, depreciating exchange, rising export and import prices, budgetary deficits with increased private demand for credit, increased note issue.

The American Economic Review (Cambridge, Mass.).

JUNE, 1922. *Guild Socialism: a Two Years' Test.* The literature and propaganda emanating from the National Guilds League since 1906, and the work of the building societies during the last two years, are lucidly described. Some advance has been made towards "A. E." 's ideal: "workers transforming their unions into co-operative productive societies," dispensing with "the capitalist exploiter of labour." *What Determines the Volume of a Country's International Trade.* H. FEIS. *German War Finance.* F. R. FAIRCHILD. Based on Prof. Charles Rist's *Les finances de Guerre de l'Allemagne.* *Foreign Trading Zones in our Seaports.* E. CLAPP. Free zones in the sense of sections of seaports adapted to facilitate transshipment and re-export are advocated.

A Supplement contains Papers and Proceedings of the Thirty-First Annual Meeting of the American Economic Association.

Political Science Quarterly (New York).

JUNE, 1922. *Regulation of Business in Canada.* ROBERT J. MCFALL. A record of experiments on Government Control; with special reference to Combinations. *The French Railway Problems.* HARVEY J. BRESLER.

Review of Economic Statistics (Cambridge, Mass.).

JULY, 1922. *Review of the Second Quarter of the Year.* WARREN M. PERSONS. *Balance of International Payments of the United States for the Year* 1921. JOHN H. WILLIAMS. Light is thrown on the main features of the balance: namely, the great decrease in the excess of merchandise exports, the unprecedented inflow of gold, the great increase in the flotation of foreign bonds in the American Market. *The Volume of Production of Basic Materials in the United States,* 1909-1921. EDMUND E. DAY. Production in 1921 as compared with 1919 has declined in each of the four main departments, Agriculture, Animal husbandry, Forestry, Mining, on an average of "all basis materials," to 92·2 in 1921, from 100 in 1920.

Journal des Économistes (Paris).

JUNE, 1922. *Le comité des banquiers et l'Emprunt Allemand.* YVES GUYOT. *Le budget britannique,* 1922-23. W. M. J. WILLIAMS. *Le mécanisme d'assurances Sociales* (Suite). L. FORGERON.

JULY, 1921. *Les dangers budgétaires.* YVES GUYOT. *Une aggravation de l'inquisition fiscale.* X. On the inquisitorial character of the French income tax. *Le mécanisme . . . d'assurances Sociales.* L. FORGERON.

Revue de l'Institut de Sociologie (Brussels).

Les variations demographiques et le progrès. E. DUPRÉEL. Progress and civilisation are a fruit of increase in numbers—an increase not necessarily good. *Les institutions des primitifs Australiens* (Suite). NADON IVANITZKY.

[There is appended an obituary note of Ernest Solway, the founder of the Institute, who closed his beneficent career last May. He was dominated by the idea of unifying science τὸ ὅλον εὑρεῖν. Thus he aimed at a synthesis of gravitation and the conservation of energy. He explained sociology by energetics.]

Jahrbücher für National Ökonomie und Statistik (Jena).

MAY, 1922. *Weltanschauung und Wirtschaftführung.* H. KRÖGER. *Vom logischen Structurwandel der volkswirtschaftlichen Begriffe.* DR. THEODOR BUDDEBERG. An elaborate disquisition leads to the conclusion that in the structural changes in the Scientific Concept-world there is manifested on the logical side the universal movement from the static to the dynamic view of the world (*Weltbetrachtung*).

Weltwirtschaftliches Archiv (Jena).

APRIL, 1922. *Die Grenzen der Verwendung vom Arbeit in der Wirtschaft.* DR. ANDREAS PREDÖHL. *Neue Verkerswege in Afrika.* DR. FRITZ KLUTE. *The Influence of the Great War upon Japanese National Economy.* SHOTARO KOLIMA. The main result is the acceleration of progress from the agricultural to the industrial stage; involving growth of capitalism and of labour movements. The writer is Assistant Professor in the University of Kyoto. The article is in English.

Ungarische Jahrbücher (Berlin

Vol. I. The new Journal, edited by Robert Graggers, deals with the affairs of Hungary and neighbouring States.

De Economist (La Hague).

MAY, 1922. *Sax, Bordewijk en Von Böhm-Bawerk's Dritter Grund.* J. H. LOGEMANN. Referring to Prof. Bordewijk's controversial articles in previous numbers. *De indische financien.* H. G. VAN DER MANDERE. The concluding part of a study on the finances of Dutch India.

JULY–AUGUST. *Prof. Bordewijk contra Oppenheimer en Sax.* A. SPANJER. *Von Böhm over de rechtvaardigheid der rente.* B. VAN GENECHTEN.

Scientia (Milan).

VOL. XXXI., NO. cxxii. 6. *Les postulats nécessaires d'une politique de laisser-faire.* T. N. CARVER.

NO. cxxii. 7. *Le Système Capitaliste.* L. L. PRICE. The system is defended against the misrepresentations of Socialists. In favour of the modern banking system there is happily quoted Aristotle's approval of the State in which things are used in common, but possessed by individuals.

Giornale degli Economisti (Rome).

MAY, 1922. *Sciopero degli contribuenti.* G. DEL VECCHIO. On the strike against over-taxation which is threatened in Italy. *Il gettito dei dazi doganali.* V. PORRI. Statistics of the proceeds and proposals for the reform of the Italian Customs duties. *Il movimento sindicale.* G. CARANO-DONVITO.

JULY. *La riforma delle casse di risparmio.* B. GRIZIOTTI. *Linee di navigazione sovvenzionate.* G. MARCHETTI.

AUGUST. *Inflazione monetaria e corso dei cambi.* MARCO FANNO. The first two chapters (to be followed by three more) deal with the circulation of and the equilibrium-price of gold and foreign exchange under a *régime* of forced currency. *Il sistema monetario . . . della Somalia Italiana.* F. S. CAROSELLI. The monetary system of Italian Somaliland, including the Italian rupee, was much d[illegible]urbed by the war.

D me

Metron (Padua).

that *uête de la Société des Nations sur la question des matières premières et des derivées alimentaires.* A general report drawn up by PROF. GINI, deals with the present economic situation, the causes which obstruct the provision of raw material and food stuffs, and the measures which the Society of Nations might initiate. Follow reports on several particular industries, Cereals, Wool, Cotton, Coal, etc., by F. VINCE and N. SLOUTSKI.

Revista Nacional de Economia (Madrid).

VOL. XII., NO 35. *La crisis hullera.* LEOPOLDO A. ARGUELLES. On the coal crisis in Spain; aggravated by her "absurd protectionism." *El Malestar del mundo después de la paz.* An interesting review of the causes and results of the war introduces the problems of peace. *El problema del salario minimo.* ANTONIO RATO. A comparison of the methods adopted in different countries to secure a minimum wage.

NO. 36. *Consideraciones acerca de la conferencia de Génova.* J. NART RODES. *La situation de las tarifas y el contrato del transporte ferroviario.* J. M. DE LA FUENTE. On railway rates in Spain. *El resurgimento industrial en España en el siglo XVIII. Carmelo.* V. MEY. Commercial companies promoted the industrial recovery of Spain in the eighteenth century. *La evólución del comunismo ruso.* J. DE FELS.

NEW BOOKS

English.

Cisař (Jaroslav) and Pokorný (F.). The Czecho-Slovak Republic. A survey of its history and geography, its political and cultural organisation, and its economic resources. London: Fisher Unwin. 1922. Pp. 218. 9s.

Clarke (John J.). Social Administration, including the Poor Law. London: Pitman. 1922. Pp. 364.

Darling (M. L.). Some Aspects of Co-operation in Germany, Italy, and Ireland. Lahore. (London: King). [illegible] Pp. 191.

Dicksee (Lawrence R.). The True Basis of Efficiency. London: Gee. Pp. xii + 99. 5s.

Gini (Prof. C.). Report on the Problem of Raw Materials and Foodstuffs. (Published by the League of Nations.) London: Constable. 10s.

Hirst (Francis W.). Excessive Expenditure and Oppressive Taxation. A Popular Version of the Geddes Reports. With an Introduction by F. W. Hirst. London: League to Enforce Public Economy. 6d.

Hudeczek (Dr. Karl). The Economic Resources of Austria (translated). Vienna: Mainz. 1922. Pp. 74.

International Law, British Year Book. Third year of issue. London: Frowde. 1922. Pp. 260.

Lehfeldt (R. A.). The National Resources of South Africa. With a Preface by the Right Hon. J. C. Smuts. London: Longmans. Pp. 79.

Mitchell (A. A.). The Breakdown of Minimum Wage. A Memorandum on Unemployment. Glasgow: Maclehose. 1922. Pp. 23.

Orr (John). A Short History of British Agriculture. London: Milford. 1922. Pp. 96. 2s. 6d.

Rees ( ). British Trusts. London: King. 1922.

Rhys-Davids (T. and C. A.). Cambridge History of India. Vol. I. Cambridge: University Press.

[Chapters VII and VIII by Professor Rhys Davids and Mrs. Rhys Davids, also a Professor, dealing with economic conditions in Buddhist India, supplement the article on *Economics in Ancient India* contributed by Mrs. Rhys Davids to the Economic Journal for 1901. *It is interesting to find anticipations of modern economic practices, co-operative building, mobility of labour in spite of caste, etc.*]

Rothfield (Otto). Impressions of the Co-operative Movement in France and Italy. Bombay. (London: King). 1920. Pp. 87.

ROWNTREE (SEEBOHM). Industrial Unrest: A Way Out. London: Longmans. 1922. Pp. 48.

[The way is indicated by five conditions: (1) Reasonable wages, (2) Hours affording time for recreation and "self-expression," (3) Security from unemployment, (4) A share in determining conditions of work, (5) A good scheme of profit-sharing.]

SARGENT (A. G.). Coal in International Trade. London: King. 1922. Pp. 73.

SPALDING (W. F.). The London Money Market. A Practical Guide to What it is, Where it is, and the Operations Conducted in it. London: Pitman. 1922. Pp. 215.

Statesman's Year Book. Edited by Sir John Keltie and M. Epstein. London: Macmillan. 1922. Pp. 1568.

[This statistic[illegible]l historical annual of the states of the world has maintained and [illegible] its usefulness. The Irish Free State obtains a notice suited to its [illegible]al condition.]

S[illegible]RT (W.). J. Keir Hardie. With an Introduction by that a[illegible]ay MacDonald. London: Cassell. 1922. Pp. 387. 15*s.*

STRICKLAND (C. F.). Studies in European Co-operation. Lahore. (London: King). 1922. 166.

STRÖKEL (HEINRICH). Socialization in Theory and Practice. Translated by H. J. STENNING. London: King. 1922. Pp. 341.

[The writer, whose competence is attested by his having been appointed Finance Minister in the Prussian Revolutionary Government, November, 1918, criticises several theories, including Guild Socialism; and describes attempts to put Socialistic principles into practice in Russia, Germany, Hungary, etc. Experience has shown that men cannot be treated as pawns to be moved as in a game of chess. "Individuals with needs, passions, weaknesses, prejudices" will not fit into a revolutionary mould.]

American.

BONNETT (CLARENCE E.). Employers' Associations in the United States. New York: Macmillan Co. 1922. Pp. 594.

[A study of typical associations, which mostly agree as to their aims—industrial peace and the rights of property—but differ as to methods. The author is Professor of Economics in Tulanie University of Louisiana.]

CARVER (T. N.). Principles of National Economy. Boston: Ginn. 1921. Pp. 773.

[Certain "habits, policies, and institutions" are recommended as contributing to national prosperity, "never on sentimental views of morality." The writer goes over the main topics of Political Economy, adding at many points something or at least something that he was the first to point out, notably the "minimum sacrifice" theory of taxation.]

FISK (HARVEY E.). French Public Finance. In the Great War and To-day. With chapters on Banking and Currency. New York: Bankers' Trust Company. 1922. Pp. 363.

[The statistical data have been obtained from official sources and the proofs have been revised by French financial authorities. The authentic exposition enhances the obligation under which the student is placed by previous publications of the Bankers' Trust Company, especially its history of English Public Finance.]

HILL (HOWARD COPELAND). Community Life and Civic Problems. Boston: Ginn & Co. Pp. 528 + xxxiii. 7*s*. 6*d*.

[A text-book in civics; the outgrowth of experience in teaching in schools.]

KIMBALL (EVERETT). State and Municipal Government in the United States. Boston: Ginn & Co. 1922. Pp. 581. 17*s*. 6*d*.

[A description of "local"—including both State and Municipal—government in the United States. The author is Professor of Government at Smith College.]

KNIGHT (FRANK H.). Risk, Uncertainty, and Profit. Boston: Houghton Mifflin. 1921. Pp. xiv + 381. $3.

LANDAU-ALDANOR. Lenin. Translated from the French. New York: Dutton. 1922. Pp. ix + 241. $3.

[Includes biographical details and studies on socialist theories and prospects.]

MITCHELL (WESLEY) and OTHERS. Income in the United States: Its Amount and Distribution. 1909–1919. V[illegible]er iss[illegible] New York: Harcourt Brace & Co. 1921. Pp. xvi + 152. $[illegible]

[An important joint composition by the National Bureau of Economic Research.]

MOON (P. T.). The Labour Problem and the Social Catholic Movement in France. New York: Macmillan Co. 1921. Pp. xii + 399. $3.25.

PALM (FRANKLIN CHARLES). The Economic Policies of Richelieu (University of Illinois Studies). Urbana: University. 1920. Pp. 202.

PARKER (E. H.). China: Her History, Diplomacy, and Commerce from the Earliest Times to the Establishment of the Chinese Republic in 1917. New York: Dutton. 1922. $5.

PHELPS (F. W.) and MYRICH (J. W.). Utilitarian Economics. Washington: Seattle.

OSGOOD (E. L.). A History of Industry. Boston: Ginn. 1921. Pp. 430. $1.72.

ROSSMOORE (E. E.). Federal Income Tax Problems, 1922. New York: Dodd. 1922. Pp. 541. $5.

[Instead of general statements with cumbrous qualifications, the author—a Lecturer for the Bureau of Internal Revenue—discusses concrete problems, 336 in all. *E.g.* "The Brown and Wilson Company, a domestic personal service corporation, shows a taxable net income of $64,000 for the fiscal year ending June 30, 1922. *Question*: What is the income tax assessable against the above Corporation? *Answer*: Income tax at 12½ %, $8000. Income tax assessable (½ of above) $4000." References to the Revenue Act of 1921 illustrate the answer.]

TAUSSIG (F. W.). *Selected Readings on International Trade and Tariff Problems.* Boston: Ginn. 1921. Pp. x + 266.

VERNON (H. M.). Industrial Fatigue and Efficiency. New York: Dutton. 1921. Pp. viii + 264. $85.

WATKINS (G. P.). Electrical Rates. New York: Nostrand Co. 1921. Pp. 118.

[Wholesale rates and quantity discounts, the theory of differential, these and other questions of economic interest transcending the business of electrical engineering are discussed by one who has been Assistant Chief Statistician of the New York Public Service Commission. He considers that uniformity of price results from the moral force of public opinion rather than from any natural tendency.]

French.

BUDAY (LADISLAS). La Hongrie après le traîte de Trianon. Paris : Roustan. 1922. Pp. 297.

LABADIE ([illegible]). Si J'étais Ministre des Finances. Paris : Grass[illegible] Pp. [illegible].

MONCHRESTIEN. Le problème des Assurances Sociales en France. Paris : Société d'Études economiques. 7 francs.

RUEFF (JACQUES.). Des Science Physiques aux Sciences Morales. Preface de M. C. Colson (Les questions du temps present). Paris : Alcan. Pp. 202.

[M. Colson recommends this daring synthesis as containing many ideas that are dear to him [illegible] in a new and striking form, and many that seem to him both new [illegible] The author reflects philosophically on several specimens of mathemati[illegible]; and describes Marxian theories as "non-Euclidean."]

[illegible]). Le droit Ouvrier : Tableau de la Législation [illegible] Actuelle. Paris : Colin. 1922. Pp. 210.

SUBERCASEAUX (G.). Le papier monnaie. (Bibliothéque international d'économie Politique). Paris : Giard. 1920. Pp. 446.

German.

KARLSBERG (DR. BERNHARD). Geschichte und Bedeutung der deutschen Durchwandererkontrolle. Hamburg : Enoch. 1922. Pp. 167.

[A study on the regulations about the passage of immigrants through Prussia; throwing light on the policy of restricting emigration or immigration.]

SZANA (DR. ALEXANDER). Länder und Völkerkunde Jugo Slawiens. Heidelberg : Groos. 1921. Pp. 174.

SZANA (DR. ALEXANDER). Ungarn. (Perthes' Kleine Völker— und Landerkunde, Band 9). Stuttgart : Perthes. 1922. Pp. 138.

SZANA (DR. ALEXANDER). Die Neuen Wirtschaftsprobleme der Donau. Stuttgart. 1921. Pp. 43.

Italian.

LORIA (ACHILLE). I fondamenti scientifici della Riforma economica. Turin : Bocca. 1922. Pp. 575.

[A secondary title describes the book as a study on the laws of production. There is wanting an economic theory of production; for "all that writers have been able to say up till now on the economic aspect of product may be resolved into a series of empty and insignificant assertions." A theory of economic reform is likewise wanting.]

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EQUAL PAY TO MEN AND WOMEN FOR EQUAL WORK[1]

1. SHOULD men and women receive equal pay for equal work? This question is in a peculiar degree perplexed by difficulties that are characteristic of economic science. They arise from the presence of a subjective or psychical element that is not encountered in the purely physical sciences. Outward and visible wealth cannot be quite dissociated from the inward feeling of welfare. But the ideas of welfare or well-being are deficient in the simplicity and distinctness which conduce to accurate reasoning. It may be, indeed, that there is something indefinite and metaphysical about certain conceptions which the higher physics now involve. But the practical uses of those sciences are not thereby impaired. Speculations about four-dimensional time-space do not much interfere with the work of the engineer. But the connection of our studies with things higher than material wealth affects injuriously the reasoning even about material wealth. Sentiment exercises a disturbing influence--a disturbance peculiarly to be apprehended in dealing with a question which touches not only the pocket but the home. Nor even when this danger is avoided does the logic of political economy escape the consequences of its connection with the higher parts of human nature. The most correct and unbiassed economic conclusions are liable to be overruled by moral considerations. This fate, too, is particularly to be apprehended for arguments on the present subject. Guarding against these difficulties, I propose to distinguish and to discuss separately two inquiries into which the proposed question may be subdivided, according as it is referred to external wealth only, or also to the attendant internal feeling of welfare.

2. The disturbing effect of sentiment or prejudice makes itself felt, at the very outset of the discussion, in the definition

[1] Presidential Address to Section F of the British Association, Hull, 1922.

of the issue to be discussed. In masculine circles the question is often dismissed with the remark that the work of women never, or hardly ever, is equal to that of men. The truth of this proposition will be considered later (below, 14). Here it is relevant to observe that even if the proposition were true the question would not be stultified. For the term "equal" is evidently not to be interpreted, for the purpose of this inquiry, as identical in amount. Equality, as Aristotle says, is of two kinds, numerical and proportional—meaning that the share of A is to the share of B as the claim or worth (ἀξία) of A is to that of B. So when Adam Smith propounds a maxim in the observation of which, he says, consists what is called the equality of taxation, it would be trivial to object that the subjects of the State are not all equal in respect of ability to contribute. Of course he meant, as he says in the context, taxation "in proportion to their respective abilities"; not implying that the abilities are equal. The question then arises (in economics as well as in politics), What is the criterion of that worth which governs distribution, according to which shares are to be distributed? "Pay in proportion to efficient output," the phrase used by the War Cabinet Committee on Industry, expresses the meaning approximately. By "equal efficient output" may be understood, in the phrase of Dr. Bowley, "equal utility to the employer." To the same effect others speak of equal "productivity" or "productive value."[1] With these phrases there must be understood a certain equality on the side of the employee as well as on the side of the employer or community. Thus, when the Children of Israel were compelled to gather straw in the fields, the bricks which they made might have been of the same utility to the taskmaster as when the raw material was obtained gratis. But if the workers received the same remuneration per dozen of bricks as before, we should not say that, as compared with the former terms, they were receiving equal pay for equal work. Again, there might be nothing to choose from the workers' point of view between carrying a certain quantity of silver or the same weight of lead for the same distance; while the employer or customer might derive a much greater advantage from the transportation of silver than from that of lead. If

[1] The definition given by the (majority of the) War Cabinet Committee is at s. 211 of their Report [Cmd. 135], 1919. Professor Bowley's definition is in the first column of p. 177 of (Appendices to) the *Report on Women in Industry* [Cmd. 167], 1919. Mrs. Fawcett adopts Miss Eleanor Rathbone's definition, which is substantially identical with our first definition, the one proper to the present study (ECONOMIC JOURNAL, 1918, p. 3). It is quoted in part below (14)

now the carriage of silver is restricted (by custom, say, or favouritism) to a class defined by some attribute unconnected with the value of their service (uncorrelated with speed, security, punctuality, and so forth), the carriers of lead and silver would not be receiving equal pay for equal work, although each class received a pay proportional to the utility of its service. In short we must understand with the term "equal work" some clause importing equal freedom in the choice of work. This condition should include equal freedom to prepare for work by acquiring skill. There are thus presented two attributes: equality of utility to the employer as tested by the pecuniary value of the result, and equality of disutility to the employee as tested by his freedom to choose his employment. These two attributes will concur in a régime of perfect competition. For then, theoretically, each employer will apply labour in each branch of his business up to the point at which the return to the unit of labour last applied is equal to the cost of that unit, and the same (*ceteris paribus*) as in all branches of each business. Likewise, in the state of equilibrium which characterises perfect competition the employee cannot better himself by taking the place of another. The question thus conceived may be restated: Should there be perfect competition between the sexes? The question thus put requiring a categorical answer, Yes or No, may be labelled A, to distinguish it from the question of degree, B, which may be asked if a categorical answer is not forthcoming, namely, What sort or amount of competition between the sexes is advisable?

In the question thus stated equal work is defined objectively by the fact that as between two tasks the worker is indifferent. This fact, like the action or inaction of Buridan's ass, is ascertainable by the senses. But something more than what is given by physical observation seems to be implied in ordinary parlance with reference to our question. Some comparison between the feelings of the workers seems to be implied in statements such as the following: "The remuneration of the peculiar employments of women is always, I believe, greatly below that of employments of equal skill and equal disagreeableness carried on by men" (J. S. Mill, *Political Economy*, II. xiv. 5). "Men and women often work side by side in the same schools; . . . and we are satisfied that the work of women, taking the schools as a whole, is as arduous as that of men and is not less zealously and efficiently done" (Report on Teachers in Elementary Schools, Lond., Cmd. 8939). "An unfortunate female does not receive for thirteen or fourteen hours' close daily application during

six days as much as a man for one day of ten hours" (referring to Philadelphia early last century; cp. Carey, *Social Science*, Vol. III. p. 385). If equal work is interpreted as equal disutility, in the sense of fatigue or privation of amenity, then equal pay may be interpreted equal satisfaction obtained from earnings. Equality in this sense is not always predicable of equal external perquisites. It is conceivable, for instance, that a gaudy livery might in general have more attraction for one sex than for the other. This second question, which is presented by the subjective interpretation of the terms, like the first, may be subdivided according as (*a*) a categorical answer is demanded, or (*b*) the question is one of degree.

In the first of the two inquiries which have been distinguished we may, if we can, maintain the position assumed by Jevons when he disclaimed any attempt to "compare the amount of feeling in one mind with that in another," when he affirmed that "every mind is inscrutable to every other mind, and no common denominator of feeling seems to be possible" (*Theory of Political Economy*, p. 15). The second inquiry presupposes the faculty which forms the main theme of Adam Smith's *Theory of Moral Sentiments*, Sympathy; in addition to the self-interest which is prominent in his *Wealth of Nations*. The first inquiry belongs to political economy in a strict or "proper" sense, which we may call pure economics. The second inquiry belongs to political economy in a larger sense, which includes the satisfactions attending the possession and use of wealth—say the economics of welfare. The second inquiry is wider than and comprehends the first; since an increase in welfare is, *ceteris paribus*, apt to attend an increase in wealth. As equality in the first sense, concerned with production only, tends to maximise the national income, so equality in the second sense, affecting distribution, tends to maximise that aggregate of welfare which utilitarian legislation increases, which wise taxation diminishes as little as possible.

Above both these aims, higher even than economic welfare, is well-being other than economic—moral or spiritual good; a hurt to which may well outweigh a gain in satisfactions less independent of material conditions.[1] But the "should" in the question with which we started is to be interpreted as referring only to advisability in the first or second sense. The answers to the question thus limited may at least afford materials for the

[1] On the distinction between economic welfare and welfare as a whole, see Pigou, *Wealth and Welfare*, ch. i. s. 2, *et seq.*

answer to it in all its bearings. For the present I confine myself to the question in its first sense. In a sequel I hope to consider the question in its second sense.

3. To the question (A), whether competition between the sexes should be restricted, it may seem sufficient to reply that competition between all classes should be unrestricted. In the immortal words of Adam Smith, "all systems, either of preference or of restraint, being completely taken away, the obvious and simple system of natural liberty establishes itself. Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into competition with those of any other man or order of men." This system tends to increase "the real value of the annual produce of its (the society's) land and labour," or, as we now say, the national income. It is pointed out by Professor Pigou that, in order to secure a maximum of produce, productive resources must be so distributed that the net product of the unit last applied in each branch of industry—the marginal productivity—may be the same for all branches. To this proximate end *laissez faire* is a means. A maximum of wealth will thus in general be attained by unrestricted competition.

4. But a *maximum* is not always the *greatest possible* value of which a quantity is susceptible.[1] The top of a hillock presents a maximum; but it is not always the highest attainable height. Half-way up Mount Everest is higher than the top of Snowdon. So it may happen that the unrestricted play of competition between short-sighted, self-interested employers and desperately poor workers, though securing a temporary maximum of production, may bring about that *degradation of labour* which the warmest champions of competition have apprehended; notably Francis Walker (*Wages Question*, ch. v., and *Political Economy*, Art. 343 *et seq.*). There may occur the "strange and paradoxical result" described by Marshall (*Principles of Economics*, VI. iii. 8; cp. iv. 1): employers adhering to old methods which require only unskilled workers of but indifferent character, who can be hired for low (time-) wages. Even Mill admits that unrestricted competition may tend to a lengthening of the hours of work which it is desirable to restrict by law (*Political Economy*,

[1] As to the relation between maximum and greatest possible advantage, see Pigou, *Economics of Welfare*, Part II. ch. ii. s. 7 *et seq.*, restating the doctrine of his *Wealth and Welfare*, which has been paraphrased by the present writer in the ECONOMIC JOURNAL for June, 1913, p. 215.

V. xi. 12). On purely economic grounds, apart from humanitarian sentiment or Socialist bias, it seems that in certain cases the community may with advantage interpose to regulate the labour market. From such regulation female labour could claim no exemption; rather the depression or *débâcle* of industry that is apprehended would be aggravated by the competition of women. Their competition would be particularly effective owing to three incidents. First, the minimum of requirements for efficiency, of actual as distinct from conventional necessaries, is less for a woman than a man (in the ratio of 4 : 5 according to Rowntree). This circumstance might acquire a dangerous importance in a struggle for bare life, though not of much significance, it may be hoped, in prosperous conditions. Secondly, wives and daughters are apt to be subsidised; and though subsidies do not always lead to the offer of work on lowered terms, this result may be anticipated in the case contemplated.[1] Last, and not least, the woman worker has not acquired by custom and tradition the same unwillingness to work for less than will support a family, the same determination to stand out against a reduction of wages below that standard. Altogether, if we are convinced that some action must be taken to avert the evils which have been glanced at (cp. Marshall, VI. xiii. 12), it seems that our question (A) cannot receive a categorical answer in the affirmative.

5. I dismiss section A with the following cautions: (*a*) Let us not forget the general presumption in favour of *laissez faire*. It may be true that the top of a hill is not so high as that of a neighbouring mountain. It may be probable that by getting down from the hill and getting up on the mountain we shall ultimately attain a position higher than the hilltop. But the transition, over unknown ground perhaps, is not without danger. For example, many who have left the simple path of Free Trade in order to attain greater prosperity through the protection of infant industries have not bettered themselves.[2] (β) Let us remember that there are limits to the effects of regulation. It is well to prescribe: "The best way to secure the necessary advances in wages would be to set up Trade Boards for all industries and instruct them to bring minimum wages for men

[1] As to the effect of subsidies see Pigou, *Economics of Welfare*, Part V. ch. vii. s. 3, restating *Wealth and Welfare*, Part III. ch. viii. s. 3.

[2] The advantages theoretically obtainable by the scientific protection of infant industries are well exhibited by Professor H. O. Meredith (ECONOMIC JOURNAL, 1906). But he adds: "I know no case in which Protection has demonstrably done more good than harm."

as well as women as soon as possible to a level which would fulfil the conditions indicated above (enabling the man to marry and support a family and the single woman to live in decent comfort). The rise will be made possible by the increase of productivity." But unfortunately, such is the uncertainty of human affairs, the required increase of productivity does not always follow the determination of a desirable minimum, as the Australians have lately experienced. In the fixing of minimums, as in the cutting of coats, regard must be had to the amount of material or means available. (γ) In view of the uncertainties attending our course once we leave the obvious and simple system of natural liberty, let us advance with great caution. Our motto should be *pedetentim*, testing each foothold before committing ourselves to an irrevocable step; prepared to retract if the ground prove unsafe. An excellent example of the appropriate method is afforded by the English Trade Boards. The Committee to which they owe their institution (1908) recommended that "Parliament should proceed somewhat experimentally," that legislation should at first be "tentative and experimental" (Report on Home Work, 1908, No. XV. 40, 54). The first step having proved encouraging, a further step was tried. But that further step, having proved unsafe, is to be retracted, as recommended by the Cave Committee (Cmd. 1645).

6. B. Under section B, dealing with the question as one of degree, there might perhaps be included the comparative treatment of male and female workers among the classes which shall have been excluded from open competition. Thus, according to Charles Booth's plan of segregating the feckless class who spoil the labour market, his class B, what will be the distribution of work and of pay (or should we say of rations?) as between the sexes? But such questions belong rather to our less purely economic sequel. In any case I shall not be expected to pronounce on hypothetical cases as numerous as the Socialistic schemes which are in the air. Under head B it must suffice to consider a state of things in which, desperate competition having been somehow ruled out, there remain competitors freed from the deranging effect of extreme poverty and incompetence. The case is that of which Charles Booth said that the "hardy doctrines" of the individualist system "would have a far better chance in a society purged of those who cannot stand alone" (*Life and Labour*, Vol. I. p. 167, ed. 2). Or we may recall Mr. Seebohm Rowntree's distinction between wages below and above his minimum: "the former should be based on the human

needs of the workers, the latter on the market value of the services rendered" (*Human Needs*, p. 120). It is the latter kind of wages only that are now to be considered. For a first approximation (I) let us simplify the problem by abstracting the circumstances of family life, considering the labour world as if it was composed of bachelors and spinsters.

7. I. Competition now being freed, the Smith-Pigou principle (above (3)) resumes its authority. The best results will presumably be obtained by leaving employers free to compete for male or female labour. Thus equal pay for equal work would be secured in our sense of the term; which does not imply that the time-earnings of the sexes should be equal (2). Equality in our sense would be realised in the conceivable state of things which a high authority (Professor Cassel) appears to regard as actual when he argues that but for the inferiority of female labour "it is not clear why the employer should not further (than he does) substitute female labour for the dearer male labour" (*Theoretische Sozial-Economie*, p. 293). There is much force in Professor Cassel's argument; and his conclusion would be perfectly true if the implied premiss, the existence of perfect competition, were true. But competition is not perfect while it is clogged by combinations both of employers and employed. An employer of many workmen is in himself virtually a combination, as Dr. Marshall has pointed out. Men, being generally better organised than women, have exercised an unsymmetrical pressure on the employer to their own advantage. For instance, "London printing-houses dare not employ women at certain machines unless they are prepared to risk a long and costly fight" (Mrs. Fawcett, ECONOMIC JOURNAL, 1904, p. 297. cp. 1892, p. 176). I have been told of similar proceedings elsewhere.

8. The concession of the employer to male pressure is facilitated by the circumstances that, though the use of male labour beyond a certain limit is to his disadvantage, yet it is probably *not very much* to his disadvantage. This circumstance is deducible from a proposition pertaining to the theory of maxima, of which I shall hereafter make much use. It may be stated thus: If y is a quantity which depends upon - increases and decreases with —another quantity, x, the change of y consequent on an assigned change of x is likely to be particularly small in the neighbourhood of a value of x for which y is a maximum.[1] For example,

[1] Mr. Bickerdike has made an interesting application of the property to the theory of Free Trade (ECONOMIC JOURNAL, Dec. 1906). His argument is discussed by the present writer in the ECONOMIC JOURNAL for September 1908, p. 401.

in ascending a dumpling-shaped hill from a point of the plane on which the hill stands, the first hundred yards of advance in the direction of the summit might correspond to an elevation of fifty yards above the plane. But as the summit is approached the same change of length measured along the surface may be attended with a change of height that is a hundred times, or even a thousand times, less than what it was at a distance from the summit. The principle is illustrated by the well-known proposition that a small tax on a monopolised article forms a *very small* inducement to the monopolist to raise the price and reduce the output of the taxed article. Thus, in an example given by Cournot (to illustrate another property of monopoly) a (specific) tax amounting to 10 per cent. of the price before the tax will afford a motive to the monopolist to raise the price, but a very weak motive, since by making the change he will benefit himself only to the extent of ½ per cent. of his profits. A tax of 1 per cent. would afford a very much weaker motive. By raising the price to the figure which (after the imposition of the tax) yields maximum profit he stands to gain (to save upon the loss caused by the tax) about a twenty-thousandth part of his profits!

9. The pressure of male trade unions appears to be largely responsible for that crowding of women into a comparatively few occupations, which is universally recognised as a main factor in the depression of their wages. Such crowding is *primâ facie* a flagrant violation of that free competition which results in maximum production and in distribution of the kind here defined as equal pay for equal work. The exclusion of women from the better-paid branches of industry may be effected less openly than by a direct veto, such as the "No female allowed" in the rules of an archaic society (*Industrial Democracy*). Withholding facilities for the acquisition of skilled trades comes to much the same as direct prohibition. A striking instance is mentioned by Mrs. Fawcett with reference to the allegation that women are unable to "tune" or "set" the machines on which they work. They were never given the opportunity of learning how to perform these operations (ECONOMIC JOURNAL, 1918, p. 4). Exclusion may also be effected by regulating that women entering an industry should conform in every particular to arrangements which are specially suited to male workers. Of such rules Mrs. Fawcett has well written: "to encourage women under all circumstances to claim the same wages for the same work would be to exclude from work altogether all those women who were industrially less efficient than men. A

woman who was less capable of prolonged physical toil, who was less adaptive and versatile than the average man, would be forbidden to accept wages which recognised these facts of her industrial existence" (ECONOMIC JOURNAL, 1894, p. 366; cp. 1904, p. 296). The exclusiveness of male trade unions has been in the past at least fostered by prejudices and conventions that are becoming obsolete. Before the Labour Commission, for instance, a witness was asked, "What is there unwomanly in steering a barge?" Answer: "It is a work that is entirely unfit for women"; also "it reduces the wages of men." It should be remembered, however, that many of the prohibitions and prejudices here mentioned as contravening free competition were adapted to avert that catastrophic competition (4) which we here conveniently suppose to be excluded.

10. The oppressive action of male unions should be counteracted by pressure on the part of women workers acting in concert. Suppose now that these balanced forces encounter the resistance of the employers, themselves perhaps associated, what will be the resultant? We may assume that the resulting arrangement will not be in strong conflict with the natural forces of competition. Probably an arrangement that the weekly earnings of women should be the same as those of men, in cases where the actual value of a woman as a worker was about 30 per cent. below that of an average man employed in the same capacity (as testified by a majority of employers before a Committee of the British Association, Kirkcaldy, *Credit Industry and the War*, 1915, p. 108), could not be maintained without tyranny on a Russian scale. But within limits thus prescribed there is room for a considerable variety of arrangements. On what principle, then, will a more exact determination be obtained? The principle most congenial to the present subsection is that which is suggested by Walker's doctrine, that "competition, perfect competition, affords the ideal condition for the distribution of wealth" (*Political Economy*, 2nd ed., s. 466; cp. s. 343).[1] We should then not only keep within those limits outside which it would be futile to set up any arrangement, as it would be swept away by the forces of competition, but also within the wide tract thus delimited we should endeavour to find the particular point which would be determined by ideal competition. The first of these precepts may conceivably be carried

[1] On the utilitarian principle of distribution, in the absence of perfect competition, I may refer to what I have said in the ECONOMIC JOURNAL, 1897, p. 552, and to my lecture on *The Relations of Political Economy to War*, p. 15 *et seq.*

out by a board of employers and employees. But the second is evidently a counsel of perfection. As Professor Pigou says with reference to railway rates, "it is plain that anything in the nature of an exact imitation of simple competition is almost impossible to attain" (*Wealth and Welfare*, p. 267 *et seq.*). In the case before us the task of the board would be particularly difficult. For, first, even if the labour contract were of the simplest possible type—so much energy applied, so many foot-pounds raised, in return for so much standard money—it appears from the mathematical theory of demand and supply that, even if competition between employers and employed were as free as can be supposed, a determinate position of equilibrium would not be reached.[1] And the contracts with which we have to do are not simple. As well explained in the First Report on Wages and Hours of Labour (1894, C. 7567) and elsewhere, the wage-rate proper to each kind of work is obtained by numerous extras and deductions corresponding to variations from a standard article or process with specified price—a standard which is itself far from simple. Here, for instance, is, or was, the definition of the standard woman's boot: "Button or Balmoral, $1\frac{1}{2}$ in., military heel, puff toe; 7 in. at back seam of leg machine-sewn, channels down or brass rivets, pumps or welts. finished round strip or black waste." The extras (and likewise the deductions) may be presumably calculated on the principle described by Mr. and Mrs. Webb as "specific additions for extra exertion or inconvenience," so as to obtain "identical payment for identical effort." Are these additions, and also the standard to which they are referred, to be determined objectively as what would result from the play of ideal competition? Or must we call in Socialistic, or, as I prefer to say, Utilitarian, principles of distribution in order to fill in the details left blank by the award of competition? However this deep question is decided, whatever blend of competition and combination is proper to the modern labour-market, it remains true that on the suppositions here made (B, I) the distribution of work and pay between the sexes ought to be conducted upon the same principles as between any other classes of workers.

11. On the general principle of distribution I have nothing to add to the little that I have said here and elsewhere. I subjoin some suggestions for carrying out the principle in the case before us. They relate to the comparative efficiency of the sexes, concerning which assumptions are to be made with

[1] See ECONOMIC JOURNAL, 1908, pp. 527–9.

caution. There are to be avoided two opposite misconceptions: the one exaggerating the comparative efficiency of men, the other that of women. The first exaggeration is countenanced by Plato when, notwithstanding his admission of women to the highest posts in his Republic, he yet holds that they are inferior to men in all the arts. Even in those arts in which they might be expected to excel, such as weaving and cookery, he seems to say that they are beaten by men.[1] In the modern world, however, it appears that women excel in certain branches of the textile art. "Having smaller hands they are able to handle the twist and weft with greater dexterity than men" (Cmd. 167, p. 79). Superiority is claimed for them, too, in typewriting and in telephoning. As nursery-maids they are certainly more efficient. The opposite exaggeration is committed by feminists when they maintain, in the words of a generally impartial expert, that "there is no reason save custom and lack of organisation why a nursery-maid should be paid less than a coal-miner."[2] No doubt it is difficult to disprove, and even to define, this proposition with reference to employments that are not common to both sexes. The comparison would seem to be as to the time-wages, say the average weekly earnings, of the two classes. The institution of the average presents difficulties. Still, I submit it as an inference based on general impressions and ordinary experience that, even if all restriction of the competition between male and female workers were removed, we should still find the average weekly earnings of the former to be considerably higher.[3]

12. The following fuller statement of the matter is submitted as intelligible and probable. Let us suppose at first that work can be defined in such precise and neuter terms that

[1] Plato hardly commits himself (*Republic*, 455D) to the statement too roundly attributed to him by Grote "that women were inferior to men in weaving no less in other things." But no doubt he considered them to be generally less efficient: ἐπὶ πᾶσι δὲ ἀσθενέστερον γυνὴ ἀνδρός.

[2] Professor Cannan, in his important contribution to our subject (*Wealth*, p. 202 *et seq.*), realises the difficulty of comparing the earnings of a children's nurse with those of her brother in his occupation of, say, carting coal.

[3] With respect to the presumption that, even if all restrictions were removed, the (time-) earnings of women would normally be less than those of men, some specific evidence is forthcoming in the case of the cotton-weaving industry—a strong case if women are particularly well qualified for that work. Yet even in that industry, "though the earnings are computed on the same table of piece-work prices, the men average more per week than the women" (Mrs. Sidney Webb, *New Statesman*, August 1914, p. 525). This statement is borne out by the "Report on Earnings and Hours" [Cmd. 4545], 1906, where the average weekly earnings for men and women in the Cotton Industry are compared (pp. xxxiv–xxxvi).

it makes no difference to the employer whether a unit of work is performed by a man or a woman. The definition should include not only a specification of the product, as in the case of the boot above instanced, but also the time taken up (affecting the "overhead" charge), the expenditure on apparatus (which may be greater for weaker persons), and so forth. In ideal competition men and women shall be equally free to choose any of the occupations so defined. It may be expected that there are some branches of industry into which women only will enter, others into which they will never, or hardly ever, enter. Let us call the former A, B, C, . . . F, and the latter, M, N, . . . Z. Let the average weekly earning in each of the former occupations be $a, b, c \ldots f$; and in the latter $m, n, \ldots z$. Then I submit that the average of $a, b, c, \ldots f$ will be less than the average of $m, n, \ldots z$. There remain occupations that are entered by both sexes: say G, H, I, K, L. For any one of these, *e.g.* I, the (rate of) pay, say ι, for unit of work in the sense above defined is to be the same for men and women; but the weekly earnings will not be the same, say i_1, for the female and i_2 for the male workers; i_1 less than i_2. The letters may be applied so that $f_1, g_1, h_1, \ldots l_1$ will form an increasing series; on which supposition it may be expected that $g_2, h_2, \ldots l_2, m_2$ will also form an increasing series, rising from the female to the male level.

The conception thus presented may be illustrated by an Australian ruling. Judge Higgins fixed the minimum rate for fruit-picking at one shilling an hour, observing that "the majority of fruit-pickers are men," that "men and women should be paid on the same level," the employer being left free to employ persons of either sex. But for the operations in the packing-sheds the minimum for (women) workers in these processes, in which men are hardly ever employed, should be fixed at 9*d*. per hour (*Commonwealth Arbitration Reports*, 1912, Vol. VI. p. 72, and context). Fruit-picking and the operations in the sheds might correspond to our L and G respectively.

If the rates attached to each specification of work are proper, the distribution will be ideal. Suppose that a slightly different system of rates, $\alpha', \beta', \ldots \iota', \ldots \mu', \nu' \ldots$ etc., is adopted. There will be a slight difference in the distribution of work and pay. But by the property of a maximum above noticed the difference to the community considered as a sort of collective monopolist, the difference to the national income will be not merely slight, but *very* slight.

13. It should be understood that the preceding representation relates only to the present, or rather to a short period in the immediate future. The period must be long enough for the removal of trade-union restrictions to be realised, for training hitherto denied to be acquired; but not long enough for a material change in physique, arts and customs. If in the course of evolution the female sex became as strong as the male, if in the progress of practical science muscular strength became less and less in demand, then the average of $a, b, \ldots f$ might no longer be less than the average of $m, n, \ldots z$. Again, a conceivable change in desiderata would affect the truth of our representation; for instance, if typewriting, telephoning and the like became more in demand than coal-mining and ironworks. Again, if the vast amount of household work that is now unpaid could only be obtained by paying for it, the demand for woman's labour and its price might be considerably raised. The general *principle of equal distribution above indicated would hold good* notwithstanding these changes; but the suggestions made for its working would require modification. The changes, however, do not appear very imminent.

14. Existing institutions being presupposed, it should be noticed that the supposition above made of work defined irrespective of sex is somewhat abstract. It would be appropriate in the Socialist community imagined by Anatole France (*Pierre Blanche*), where the employer would not inquire whether an applicant for work was a man or a woman. He would not be informed by the garments of the applicant, identical attire having been introduced along with equal conditions of work. But in the present state of things it will often be within the knowledge of the employer that it is more profitable to employ a man than a woman, although the work performed by each is identical so far as it can be defined by the most exact rate. For a woman, unlike a man, is "liable to go off and get married just as she is beginning to be of some use," as a candid champion of equal pay has observed (ECONOMIC JOURNAL, 1917, p. 59). Again, a woman is generally less useful in an emergency. As a witness before the Committee on the Employment of Women put it, "A woman punching a ticket may appear equal to a man, but she is not so useful in case of a breakdown or runaway." Of course these "secondary" differences, as they might be called, are much less serious in some industries than in others. In some permanence may be less a desideratum, a breakdown less to be apprehended. Among secondary differences is hardly

to be reckoned the alleged inability of women workers to "tune" the machines on which they work; for that regularly recurring need can be allowed for by a properly constructed rate. But it is otherwise with the risks which hardly admit of actuarial calculation. Besides, even if the probability could be calculated precisely, the compensation to the employer for carrying the risk is not to be measured by the mathematical "expectation" thereof. This point has been well brought out with reference to risks in general by Mr. Keynes in his great treatise on Probability. The point is of importance here, as it contravenes what *primâ facie* seems the simplest solution of the difficulty: that is, in all the industries where secondary differences between the sexes are operative to lower the rates for female work correspondingly. Thus in industry E, instead of the rate ϵ which would be proper in the absence of secondary differences, we should put the somewhat lower rate ϵ'. Likewise in I (above (12)), instead of the common rate ι for men and women equally, we should put a lower rate ι' for women, retaining ι for men. Such an adjustment seems to carry out the recommendations of the (majority of the) War Cabinet Committee when they contemplate "a fixed sum to be deducted from the man's rate" corresponding to the "lower value of the woman's work," if proved by the employer (par. 10 (5), p. 4). The adjustment would be in accordance with the definition of equal pay for equal work given by those who are best qualified to interpret the claim: "Any permanent disadvantage that adheres to women workers as such should be allowed for by a *pro rata* reduction in their standard rates" (Mrs. Fawcett, citing Miss Eleanor Rathbone, ECONOMIC JOURNAL, 1918, p. 3). But the reduction corresponding to the demand of the employer for women as compared with men workers could not well be calculated objectively by a board. It could only be determined by the play of ideal competition, which exists only in idea. There would be incurred the danger either (α) of the women's rate being fixed high above the point for which production would be a maximum, or (β) its being "nibbled" by the employer. The former danger is probably, as things are, not very serious; the latter is much apprehended by experts. Altogether it would seem better to proceed on the lines of Mrs. Sidney Webb's "occupational rate," rather than on the plan recommended by the majority of the Committee. Instead of fixing two rates, ι and ι', let us fix (for the defined unit of work) a single rate for men and women alike, say ι'', less than ι, which would have

been the rate in the absence of "secondary" differences. The readjustment will result in a redistribution of male and female work. The men would back out of occupations in which previously it had been worth their while to take part; the employment of women would be correspondingly extended. The process may be illustrated by an incident which Mr. and Mrs. Webb have recorded. The reduction of a farthing in the pay for a dozen of stockings resulted in that branch of the industry being deserted by the men and occupied by the women (*Industrial Democracy*, II. p. 502). If the reduction from ι to ι'' was inconsiderable, the consequences to the consuming public would be negligible upon the principle above explained (8). Otherwise a great drop from ι to ι'', by greatly increasing the number of women in the industry, might have as bad an effect on production as fixing a women's rate, ι', too near ι, the men's rate, so as, by greatly increasing the number of men in the industry, to incur the danger above labelled *a*.

15. The specious arrangement by which secondary differences may be masked through the adoption of a uniform rate is not applicable to another kind of difference between the work of the sexes which occurs in the case of some personal services. The vexed question of schoolmasters' pay illustrates this "tertiary" difference, as it may be called. If teaching were an art as mechanical as turning a prayer-wheel, then (apart from secondary differences) it would be unreasonable that men should be paid more than women for the same operation. But supposing that the presence and influence of a master, say in dealing with the bigger boys, is something different from that of a mistress, and that it is considered indispensable,[1] it is not unreasonable (in a régime of pure economics) that the desired article should be purchased at the market price. The market price of a master is higher if he comes from a class between our M and Z (14), for which the average is higher than a corresponding class of women between A and F. His higher pay is quite consistent with the finding of the teachers above cited (2), that "the work of women, taking the schools as a whole . . . is not less zealously

[1] On the payment of school-teachers, Mrs. Sidney Webb, in the course of her interesting articles on the right of the woman to free entry into all occupations, in the *New Statesman* (July–August 1914), states that "educationists think there are already too few men on the teaching staff." In this connection it is well said by Mrs. Webb: "Sex, like youth or middle age, is a peculiar characteristic which sometimes qualifies and sometimes disqualifies persons for particular tasks." The need of men teachers for boys, and other relevant considerations, are forcibly stated in the booklet, *Equal Pay and the Teaching Problem*, issued by the London Schoolmasters' Association.

and efficiently done than that of men." They might, indeed, be more diligent and in most branches of education better teachers than men. A steel knife is a more useful implement for general purposes than a silver blade. But if silver is required to preserve the flavour of dessert, the epicure must pay for the metal which has the greater value in exchange. A good cab-horse may, for all that I know, draw a vehicle as well as a high-stepping thoroughbred. But if for purposes of state and show the high-paced animal is required, high prices must be paid for the high paces. The distinction, it will be noticed, turns upon the nature and presence of the horse. If for the carriage of parcels one kind of horse was as efficient as the other, then, indeed, a carrier who charged a higher price for the delivery of parcels because he employed a particular breed of horse could only maintain this differential charge through a, presumably noxious, monopoly. That is the difference between the case of the schoolmistress and the case of the Mrs. Jones, whose grievance is recorded by Mrs. Fawcett. Mrs. John Jones during the illness of her husband passed off her own work as his to the firm of outfitters which employed him to braid tunics. "When, however, it became quite clear, John Jones being dead and buried, that it could not be his work . . . the price paid for it by the firm was immediately reduced to two-thirds of the price paid when it was supposed to be her husband's" ! (ECONOMIC JOURNAL, 1918, p. 1). Here, in the absence of tertiary (and presumably also secondary) differences, the differentiation of price was certainly contrary to the principle of equal pay for equal work.

On behalf of the schoolmistresses it may still be urged that the market price of male work is artificially raised by inequitable laws and customs. To this the Teachers' Committee might reply that if the time in this respect is out of joint, they were not created to set it right. But it is here questioned whether the time is so much out of joint. It has been submitted that the average earnings of male labour (m .. z) would probably be higher than the female average (a .. f), even if there had been introduced the most perfect freedom of competition that is thinkable in the present state of things (12). If so, the higher pay of masters for similar work does not violate the rule of equal pay for equal work in the first, purely economic, sense of the rule (2). The unequal pay for equal effort does violate the rule in the second, utilitarian or hedonic, sense. In fact, the instance is well suited to bring into view the essential difference between the two definitions of the formula. The Socialist who

aims at a closer approximation of pay to efforts and needs naturally does not acquiesce in the present arrangements (cp. Report on Women in Industry, Cmd. 135: Minority Report by Mrs. Sidney Webb, ch. ii. §§ 12, 6). But these considerations lie outside pure economics, and must be postponed to our sequel.

16. II. The presumption in favour of free competition and the methods of putting it in practice require to be reconsidered when we restore the abstracted circumstances of family life. We now encounter the dominant fact that men very generally out of their earnings support a wife and family. "It is normal for men to marry and to have to support families. . . . It is not normal for women to have to support dependants" (Seebohm Rowntree, *Human Needs*, p. 115). These words express a very general belief and sentiment. It is a norm accepted throughout the civilised world. It is embodied in the Australian determinations of minimum wage, one of which, by Judge Higgins, has been above cited (12). Another Australian Judge rules: "the man, and not the woman, is typically the breadwinner of the family" (*South Australian Industrial Reports*, Vol. II. 1918–19). Justice Jethro Brown grounds an award on "the traditional social structure which imposes on men the duty of maintaining the household." So Professor Taussig, "For a man wages must normally be enough to enable a family to be supported and reared. The great majority of working women are not in this case" (*Principles*, ch. 47, s. 9, vol. ii. p. 144). It cannot be supposed that these authoritative expressions of belief have no correspondence with reality. Indeed, the wiser and more moderate advocates of equal pay for women admit it to be "unlikely that any large proportion of married women will aim at earning their own living as the norm or standard" (Miss B. L. Hutchins, *Conflicting Ideals*, p. 63). Few would agree with the authoress of *A Sane* (sic) *Feminism*, that "domestic morality and feminine dignity make it essential for the married woman of to-morrow to be independent of her husband's income, and therefore normally dependent on some occupation outside the home . . . a work to be continued throughout married life, with occasional lapses incidental to child-bearing" (pp. 111, 113). Even Mill admits that "in an otherwise just state of things it is not . . . a desirable custom that the wife should contribute by her labour to the income of the family . . . the actual exercise in a habitual or systematic manner of outdoor occupations, or such as cannot be carried on at home, would . . . be practically interdicted to the greater number of married

women" (*Subjection of Women*, pp. 88–89). Does it not follow that the husband must support the family, so far as he is not assisted by contributions from adult children or the occasional—not "systematic"—work of the wife?

17. It has been sought to evade this stubborn fact by the contention that the occupied single woman is responsible for the support of as many dependants as the man. On the strength of an investigation conducted by the Fabian Research Committee it is maintained that "two-thirds of the wage-earning women are not only entirely self-supporting, but have others to maintain besides themselves." But grave doubts are thrown upon these figures by the more elaborate investigation which Mr. Seebohm Rowntree has recently conducted. He finds from an extensive observation of samples that "only 12·06 per cent. of women *have* either partially or entirely to support others beside themselves" (*Responsibility of Women Workers*, p. 36). If we except the cases due to the death of "the normal breadwinner"—admittedly requiring special treatment—the proportion is reduced to 4·12 per cent. The figure would not be serious even if it proved on further inquiry to be somewhat greater. For the figure has not the same significance as that which relates to the dependants of the male wage-earners. The sustentation of the old and infirm cannot be compared, as regards at least economic importance, with the support of the young, the cost of which normally falls on the male breadwinner. The world got on tolerably before the institution of Old Age Pensions; but it could not have got on at all without the support of young children by their fathers.

18. If the bulk of working men support families, and the bulk of working women do not, it seems not unreasonable that the men should have some advantage in the labour market. Equal pay for equal work, when one party is subject to unequal deductions from his pay, no longer appears quite equitable. But it can hardly be expected that the representatives of female interests should look at this question from the masculine point of view. The ladies who have shown this unusual degree of sense and sympathy are entitled to a very attentive hearing. Miss B. L. Hutchins, in her *Conflict of Ideals*, has discerned with remarkable insight the antithesis between the traditional *status* of the husband and father, expected to support a family, and the modern régime of *contract* tending to universal competition. Miss Hutchins does not see her way to ending the conflict: "it is almost impossible to make any logical scheme or theory that will fit

the woman and the young child exactly into a commercially organised society based on exchange values" (*loc. cit.*, p. 69). Miss Eleanor Rathbone, equally discerning the difficulty, is more confident about the solution. She proposes a scheme which has certainly the merit of being logical, the endowment of motherhood, as set forth in her article on the "Remuneration of Women's Services" in the ECONOMIC JOURNAL for 1917. The plan deserves consideration here as a step towards that freedom of competition which has been prescribed. The plan may also be advocated as conducing to advantages less purely economic than those now considered. When those other advantages come to be thrown into the scale, the weight of the economic arguments which I now attempt to estimate will still be relevant.

As text of the plan to be examined we may take the pamphlet entitled *Equal Pay and the Family*, the report of the Family Endowment Committee formed in 1917 at the suggestion of Miss Rathbone. With this pronouncement should be placed the proposal independently made by Mrs. Sidney Webb in her evidence before the War Committee (1919, Cmd. 135). The bright and clear *résumé* of the arguments given by Mrs. Stocks in the booklet entitled *The Meaning of Family Endowment* is also to be considered.

The purpose of the scheme may be summarised in the words of the Endowment Report: to secure "that *within each class of income* the man with a family should not be in a worse position financially because he has a family than the single man *in that class*." For the partial attainment of this purpose, allowances for children being paid only for six years, there would be required an annual grant of £154,000,000. For the fuller realisation of the plan, continuing allowances for children up to the age of fifteen, the cost would be £240,000,000 (*loc. cit.*, p. 44). "Something like 250 millions sterling annually" is the estimate of Mrs. Sidney Webb (*loc. cit.*, p. 307).

Let us separately consider, firstly the advantages, secondly the disadvantages, which this plan presents, and, thirdly, whether there is any alternative course by which much of the good result with little of the evil may be obtained.

19. i. One main advantage is thus stated in the Endowment Report: "When the national endowment of mothers and children becomes an accomplished fact this excuse for the under-payment of women (that men have families to keep) will no longer hold good, and women will be free to claim—and men to concede to

them—whatever position in industry their faculties fit them for, at a wage based on the work they do, and not on their supposed necessities" (p. 18). The endowment "would do away with the present involuntary blacklegging of men by women, by depriving employers of their one really plausible, if not actually valid, excuse for paying women less than the standard rates; so putting the competition between the sexes for the first time on a basis which is at once free and fair." The endowment would certainly facilitate the adoption of that free and fair competition which has been above recommended (9). But that recommendation presupposed that there had been ruled out a sort of competition which is described by some high authorities as not free, which is at any rate generally regarded as deleterious. That tendency to the degradation of labour is, as above explained (4), aggravated by the competition of women. Now the endowment of motherhood would not suffice to remove this danger. The transitory and episodical character of female labour would still threaten male wages. It may be objected that men, freed from the obligation of supporting a family, would no longer have a reason for not competing *à l'outrance* with equally free women. They might not have any reason; but they would surely long retain the habit, the "social custom" as it has been called, engendered by their traditional position as at least potential heads of families. In short, the proposed endowment would not remove all the difficulties attending competition between the sexes, but only those attending the ordered competition for which alone I venture to prescribe (Class B above). How large an endowment would be required to counteract the consequences of removing the restrictions on female competition? A measure is afforded by the extent to which male wages would be depressed. We need only, then, consider how much male wages are likely to be diminished by the liberated competition of women. In making this estimate we have to take into account the elasticity of labour, the probability that the greater supply of work will be met by a corresponding demand for work.[1] We have to take into account also the probability above suggested (12), that the demand for goods in the production of which men's labour plays a great part greatly exceeds, and will continue to exceed (13), the corresponding demand for women's work. When these two circumstances are taken into account it may be doubted whether

[1] See Pigou, *Wealth and Welfare*, pp. 88–89, 321 *et seq.*; and *Economics of Welfare*, Book V. ch. iii. s. 8, where reference is made to the present writer's statement of the proposition as a postulate implied in the theory of free trade. *Cp.* ECONOMIC JOURNAL, 1905, p. 195, note.

any great reduction of male wages would follow on the improvements suggested—better training of women, hours and appliances suited to their requirements, in short every degree of freedom that does not evidently tend to the degradation of labour. A comparatively small endowment, then, might suffice to deprive men of a reason for objecting to free competition. The excuse, indeed, without the reason might remain. And no doubt the more completely the burden of supporting a family is taken off the shoulders of men, the more effectually will the excuse be stopped. But a reason more specious than stopping an excuse may be advanced in favour of a large endowment. If we are about making an endowment, why confine ourselves to the one advantage of smoothing the way for free competition? Let us take the opportunity of securing a second advantage.

ii. The second advantage is the possibility of distributing the resources available for the nurture of children in such wise that the requirements of the larger families may be met more adequately than on the present system. This advantage is thus forcibly stated by Mrs. Sidney Webb: "In the actual course of Nature the distribution of children among households varying from none to a dozen or more; the number who are simultaneously dependent on their parents varying from one to more than half-a-dozen; and the time in each family over which this burden of dependent children extends, varying from a year or two to ten times that period—bear, none of them, any relation to the industrial efficiency either of the father or of the mother; or to the wage that either of them, or both of them, could obtain through individual bargaining by the higgling of the market; or yet to any actual or conceivable occupational or standard rates to be secured by them, either by collective bargaining or legislative enactment" (Report of the War Committee [Cmd. 135], p. 306). By a children's allowance payable to the mothers in all the households of the United Kingdom it may be secured that "adequate provision is made for children not by statistical averages, but case by case." This second advantage, as well as the first, would certainly be considerable, if it were unmixed.

20. I will now enumerate some disadvantages; in no particular order, seeing that the relative importance of the objections will not be the same for different mentalities.

i. The administration of enormous sums will require a corresponding multiplication of officials; an increase of that bureaucratic routine which tends to deaden individual initiative.

ii. The raising, too, of enormous sums, with the view of improving distribution, is attended with danger. It requires the subtlety of a Pigou to devise transferences from the richer to the poorer classes which shall not have the effect of curtailing the national dividend (cp. *Economics of Welfare*, Pt. V. ch. ix. ss. 7, 8). But there is reason to apprehend that no such subtlety would be exercised in the case before us. The Endowment Committee touch lightly the question of finance. They mention as an alternative to income-tax a levy of so much per cent. on all incomes, including those of the class not paying income tax. But is it likely that this method will be employed? Mrs. Sidney Webb thinks it better that the children's fund should be "provided from the Exchequer (that is to say, by taxation, like any other obligation of the community" (*loc. cit.*, p. 309). No doubt a stiffly graduated income-tax would play a great part in the formation of the fund. Much of the popularity which the scheme enjoys in labour circles is probably due to the prospect of transferring hundreds of millions from the income-tax-paying classes to the families of working-people. The imposition of an enormous additional burden on the former class would surely tend to check saving.

iii. The scheme would resemble the quality of mercy in having an effect both on him that gives and him that takes. But the resemblance would end there. The effect on the contributor will be depressing; but the effect on the recipient is likely to be more seriously deleterious. It does not require much knowledge of human nature to justify the apprehension that in relieving the average house-father from the necessity of providing necessaries for his family you would remove a great part of his incentive to work. There is doubtless much exaggeration in evidence which has been given to the effect that when wives earn, husbands idle. Yet there is probably an element of truth in the saying which is thus reported by one of our most experienced lady-inspectors, "I almost agree with the social worker who said that if the husband got out of work the only thing that the wife should do is to sit down and cry, because if she did anything else he would remain out of work" (Report on Home-Work, 46, Question 1027, cp. 1024–5). A gratuitous allowance to the mother would have an effect in this direction at least as great as her earnings have. A homely truth is expressed by Rudyard Kipling with his usual vigour when he describes how the workmen, at the Congress convened by "Imperial Rescript," received the invitation to adopt Socialistic

motives: "To ease the strong of their burden, and help the weak at their need." The English delegate replies, "I work for the kids and the missus;" and the workers of all countries join in declaring: "We will work for ourselves and a woman for ever and ever. Amen." I owe this quotation to Mrs. Fawcett, who has used it with effect in the course of a powerful protest against a scheme similar to that now under consideration, proposed by a member of the Endowment Committee (ECONOMIC JOURNAL, 1907, pp. 377–8).

It may be urged that similar objections were made to Old Age Pensions, which yet have proved a success. But the motives affected by pensions given to parents were not exactly the same as those now considered; the very mainspring of industry was not equally touched. Nor was the measure so tremendous a step in the dark. The initial cost of Old Age Pensions was but a twentieth part, and the present cost is but a tenth part, of the colossal sum demanded for the endowment of motherhood.

iv. It will be gathered from the two preceding objections that the proposed scheme is likely to result in a diminution of the provisions at Nature's feast, to use a Malthusian metaphor. It is now to be added that the number of guests will probably be increased. There will be a serious stimulus to population. Now the pressure of population on resources may not be very alarming in this country at present. But it is tenable that as regards this danger we are only enjoying a reprieve, "an age of economic grace" (cp. Marshall, ECONOMIC JOURNAL, 1907, p. 10). Is it wise to commit the country to a system which may prove unsuitable, yet unalterable?

v. The increase of population might be welcomed if it consisted of the higher types. But in the current proposals one sees no security for the improvement of the race. It is not suggested that Governments might use for this purpose the power which they will acquire as distributors of a bounty. Rather it is to be apprehended that the least desirable classes, say Charles Booth's Class A and Class B, will be encouraged to increase and multiply. It is argued, indeed, that the better class of artisans will be encouraged to keep up their good stock; while the undesirable class are already so improvident that no stimulus could add to their recklessness. But these arguments, based on a calculation of motives, seem precarious in view of the enormous risk involved. There are degrees of improvidence; there must be many who are not so improvident but that they may be made more so by encouragement. The endowment of

parents in these classes at the expense of the income-tax-paying classes may realise the gloomiest anticipations of Dean Inge. The effect be "to penalise and sterilise those who pay the doles"; to precipitate the ruin of the great middle class, to which England owes so much (*Edinburgh Review*, April 1919).

21. Let us now consider some alternative arrangements which make for the advantages and avoid the dangers which have been described.

Some arrangements calculated to render the freedom of competition more acceptable follow automatically from that liberation; for the removal of restrictions on the work of women is calculated to increase their efficiency, and an increase in their efficiency will be attended, *ceteris paribus*, with an increase in their contributions to their families.

i. The burden of the family borne by its head does not increase in proportion to the number of children; for some contribution towards family expenses is often made by the elder children. It appears from an investigation recently made by Professor Bowley that in rather more than a third of the households which he examined there were "earning children." It is presumable that they contributed something over and above their keep to the maintenance of the family (cp. Bowley, *Livelihood and Poverty*, p. 31). The family would be losers pecuniarily by the removal of these children. Many of these members would be daughters, by hypothesis in the future more efficient than at present.

ii. Where the number of the children is small, may not some contribution often be expected from the wife? Will it not be possible to arrange piece-work, or more generally precisely definable operations (12), adapted to suit women who can only work a few hours a day? It may be hoped that in the future the only alternatives open to married working women will not be a whole day's work away from home, or work in a home made intolerable by the conditions of home work (as strikingly described by Mr. and Mrs. Webb, for instance, in *Industrial Democracy*, p. 541). Something better may be expected from the progress both of physical and of economic science. Leroy-Beaulieu, who is sanguine as to this resource, characteristically hopes much from science and nothing from legislation.

iii. Leroy-Beaulieu also hopes for the contribution to a prospective family made by spinsters who expect to be married. "The girl accumulating a *dot* by work in the factory, in order

to remain at home as a married woman and bring up her family in comfort (*dans de bonnes conditions*)—this is the only real and practicable progress" (*La femme ouvrière . . .*, p. 425). Mr. Cadbury's observations on the ways of the factory girl do not encourage us to hope much from this resource in this country at present. "Only in very few cases are they (savings) accumulated in readiness for a marriage outfit" (*Women's Work and Wages*, p. 244 and context). But we may suppose an improvement in economic character as well as conditions.

iv. A more obvious compensation to men for the loss of wages—not, like the preceding, indirectly resulting from the circumstance which occasions that loss—would be afforded by an extension of the allowance now made in furtherance of education. They should be in *kind;* regard being had to Mill's principle that what Government may provide with most propriety is the commodities which people would not have spontaneously demanded (*Political Economy*, V. xi. 8).

These compensations may suffice to meet the male objection to removing restrictions on female competition.

For the further object of equalising the application of resources to the nurture of children within each grade a further extension of the last-named allowances (21, iv.) may be risked. But they should be guarded against the dangers objected to the endowment scheme (20, ii., iii. and iv.). Are those dangers sufficiently guarded against by Miss M. E. Bulkley when, in a work prefaced approvingly by Mr. R. H. Tawney, she recommends the provision of a free meal for all schoolchildren (*Feeding the Schoolchildren*, pp. 223-6)? The cost would be £12,500,000 a year. That is for one meal, dinner. But of course breakfast would often be required (p. 228).

v. A plan for equalising the burden of dependent children would be especially serviceable in the case when the family is larger than the average. That case might be met by the comparatively modest subsidy proposed by Mr. Seebohm Rowntree (*Human Needs*). He estimates that the allowance necessary to secure physical efficiency "in case of more than three dependent children" would come to only £8,000,000 (if only families with incomes below a certain figure are to be subsidised).

Here may be the place to observe that Mr. Rowntree's proposal to treat widows with dependent children more generously than at present is not nearly so open to the objections above enumerated as the endowment of motherhood in general.

vi. Some further suggestions may be obtained from the

schemes now under consideration in Australia.[1] It is proposed to levy on every employer a tax of so much per employee, and from the proceeds to form a fund which is to be distributed among mothers according to the size (perhaps also the needs) of the family. The proposal—like that of the Endowment Committee—probably owes its chance of being accepted partly to the belief that the cost of the plan will not fall on those who are benefited by the plan, but on the employer, or the capitalist, or that supposed independent and abundant resource, the State.

But if equality of provision for children within each class is sincerely desired—without the *arrière pensée* of equalising the incomes of different classes—a simpler plan is suggested. It is open to any association of men—a trades union, for example—to resolve that each member of the association should contribute a quota of his earnings towards the formation of a fund which is to be distributed among the wives of members in accordance with the size of their families. This plan would be much less open to the objections above enumerated than the endowment of motherhood by the State. It would not disturb the labour market or the financial system. It would not require legislation. Persuasion would suffice. Those who believe that such equalisation is desirable, and that there is a chance of its being accepted, should start a campaign of argument and exhortation. Bachelors and childless husbands should be persuaded to support a fund by which they may hope one day themselves to benefit as future fathers of families.

22. To sum up; equal pay for equal work, in the sense of free competition between the sexes, has been advocated, with some reservations and adjustments. Desperate disordered competition, tending to the degradation of labour, is supposed to be excluded. There are suggested compensations to families for the loss sustained by the male breadwinner through the increased competition of women. Among such compensations the endowment of motherhood on a large scale by the State is not included. The advantages weighed are economic in a strict sense. The balance may be affected when welfare or well-being in a wider sense is taken into account.

F. Y. EDGEWORTH.

[1] The origin and features of the Australian plans for the endowment of children are described in the ECONOMIC JOURNAL, 1921, by Professor Heaton. (See also Miss Eleanor Rathbone's description of the South Australian scheme in that Journal, 1922.)

EMPTY ECONOMIC BOXES: A REPLY

Dr. Clapham's entertaining paper on *Empty Economic Boxes* in the September issue of the Economic Journal is evidently designed to provoke one of his friends, "some analytic great or small," to reply. For myself I am inclined to suspect that the boxes labelled "analytic" and "realitic"—if that is the corresponding term—among economists are themselves empty, and that nobody in the world really falls into either category. Still "analytic" is a charming word and, for the purposes of this paper, I am ready to accept it as a label. In revenge, however, for letting myself be boxed in this way I claim the right, proper among friends, to indulge in whatever "brilliances" at Dr. Clapham's expense the spirit of controversy may whisper to me.

The substantial content of his paper is contained in the following propositions. (1) There are difficulties in the *conception* of a rate of returns in industry, particularly of a rate of increasing returns. (2) There are difficulties in deciding which particular industries are at the present time being conducted under conditions of increasing or conditions of diminishing returns—difficulties which keep these economic boxes empty. (3) If we could fill the boxes, very little practical good would come of it. (4) Therefore the said boxes are useless, dangerous and ought to be abolished. The first of these propositions is obviously true. Since, however, Dr. Clapham does not display, or profess to display, any difficulties in the conception of returns additional to those that have been familiar to economists for the past quarter of a century, nothing further need be said about it. In the following pages, therefore, I shall confine attention to the other parts of his paper.

Let us begin by clearing the ground. There are two broadly distinguished sorts of knowledge: "pure" knowledge about implications, such as is sought in mathematics and logic; and realistic knowledge concerned with a subject-matter presumed to be actual, such as is sought by physicists. Within that second sort of knowledge must be further distinguished knowledge that cannot, and knowledge that can, give us direct help in the practical

conduct of affairs. This second distinction seems to be somewhat blurred in Dr. Clapham's mind: with the result that it is not clear how far his antipathy to the categories of increasing and diminishing returns is due to his belief that they cannot be given a concrete filling, and how far to his belief that they cannot show us the way to card wool or impose taxes. Thus, I cannot gather from his article whether or not he would enjoy the contemplation of these categories, provided they were given a complete concrete filling *and yet* could not help practice at all. This woolliness in his critique makes the task of reply a little embarrassing.

If he is to be interpreted literally, his argument is that the analysis of increasing and diminishing returns is not worth pursuing, because, even if these economic boxes could be filled, no help would be given thereby to practice. Let us grant, for the sake of argument, that the analysis does not touch practice at all. The conclusion that it is not worth pursuing does not follow. Dr. Clapham, as a historian, is debarred from contending that the only knowledge which has value is knowledge which can guide practice; for by far the greater part of the knowledge which history aims at is totally irrelevant to practice. Hence, knowledge may have a value for its own sake. But knowledge of *implications* is just as much knowledge as knowledge of *matters of fact*. That, *if* certain conditions as to increasing or diminishing returns prevail, and *if* a tax of so much is imposed on a given article, such and such an effect will follow, is a piece of truth, just as it is a piece of truth—if it is one—that a certain English king died from a surfeit of lampreys. The historian is interested in matters of fact; but the logician is interested in implications. What right has the one to condemn the other? On what metaphysical or other basis is he entitled to lay it down, that knowledge of the form, "If X, then Y," is inferior to the knowledge of the form, "In the year 1600, X"? There are many empty boxes, in Dr. Clapham's sense, in the kingdom of pure mathematics: will he invite the mathematicians to abandon them and join in his researches about lampreys? This kind of answer to the contemner of "useless knowledge"—as followed by other people—is, I think, a perfectly legitimate one. Nevertheless, it is not one that, in the present connection, I wish specially to stress. For I do not myself judge that a knowledge of implications *of the type that pure economics can provide* has, in and for itself, any large value. To this extent I am really at one with Dr. Clapham, though, since I see no way in which a person who takes

a different view can possibly be confuted, I am less willing than he appears to be to dogmatise on the matter.

I suspect, however, that, though Dr. Clapham in words makes his valuation of different parts of economics depend on their practical usefulness, he would, in thought, be content with any *schema*, whether it had a bearing on practice or not, provided it could be given a realistic content. For I cannot imagine that a person, who thinks it worth while to study the economic conditions of the past for their own sake, should think it not worth while to study these conditions in the present except where it can be shown that practical applications result. Moreover, I am confirmed in this view by the curious complex from which Dr. Clapham appears to suffer in connection with general terms. The word "commodity," for instance, is a red rag to him. He prefers to talk of hats, not appearing to realise that, if I wish to say something which is true, not only of hats, but also of gold watches and of onions, to express the proposition in terms of hats alone is not to express it fully. When this complex is developed a little further, he will probably rebel at the statement that two and two make four, and will insist on substituting for it the statement, which is also true but is not the same statement, that two hats and two hats make four hats! This, however, is by the way. I merely refer to it because it strengthens a little my view that, in spite of his words, it is realism rather than practical usefulness that Dr. Clapham wishes to extol.

If I am right in this view, the point at issue is whether the concepts of increasing and diminishing returns are instruments of service in the construction of a realistic economic science. Dr. Clapham appears to hold that, provided, as boxes, they cannot be filled, it is self-evident they can serve no purpose of this kind. In that I venture to suggest that he is mistaken, that he has, in fact, misunderstood altogether the nature of the work that he is belittling. A central problem of economics, from the time of Adam Smith downward, has been to disentangle and analyse the causes by which the values of different things are determined. In the course of the prolonged attack that economists have made upon this problem it has been found convenient to distinguish influences acting from the side of demand and influences acting from the side of supply; and it has been found further, on the side of supply, that the relations between changes in aggregate output and changes in cost per unit differ according to the nature of the article and the period of time that we have in view. In studying the relation between aggregate output and

cost we naturally distinguish the group of conditions under which cost increases as aggregate output increases from the group of conditions under which it diminishes as aggregate output increases. Since it so happens that alterations in demand will produce effects of a different kind, and not merely of a different degree, according as one or other of these groups of conditions prevail, we are led to give the distinction between them a certain prominence. But the distinction itself is not the fruit for which we have been labouring. It is a mere incident in our general analysis of the problem of value—an analysis in which are brought to light the complex inter-relations of internal and external economies and those deep-seated difficulties, obscure to all economists before Dr. Marshall wrote, connected with the element of time. It is not to be judged by itself in isolation from the general analysis. To take the categories of increasing and diminishing returns out of their setting and to speak of them as though they were a thing that could be swept away without injury to the whole *corpus* of economics is a very perverse proceeding. It would be easy enough to drop the names; but does anybody seriously imagine that we could have any understanding at all of the influences governing economic values if the *fact* that aggregate output and supply cost have varying relations to one another were ignored?

But I am anxious to return to the question of practical usefulness, because I personally am inclined to go further in this matter than I think Dr. Clapham himself would go. Even a thoroughly realistic economic science would not, in and for itself, make any great appeal to me. Practical usefulness, not necessarily, of course, immediate and direct, but still practical usefulness of some sort, is what I look for from this particular department of knowledge. Without that, if there were hope of light alone, and not of fruit, from economic investigation, I should not trouble much about it. It is here, therefore, that Dr. Clapham's paper chiefly interests me. He maintains three separate things: first, that his economic boxes, so long as they are empty, cannot have practical usefulness; secondly, that, even if they were filled, they would not have practical usefulness; thirdly, that they cannot be filled. I proceed to consider these three contentions in turn.

The first of them I have already partly answered. These boxes, as he calls them, are not merely boxes; they are also elements in the intellectual machinery by which the main part of modern economic thought functions. If then it be granted that this thought as a whole is able to render any practical service—and, in face of the

enormous range of problems now confronting Europe in which the issues involved are largely economic, this will scarcely be disputed—these particular elements in that machinery cannot be singled out from the rest and condemned as useless; they are an organic and inseparable part of that machinery. But there is a further consideration of a more direct kind. Even regarded as boxes, and empty ones at that, the categories of increasing and diminishing returns are not mere ornaments. Knowledge about them cannot, indeed, on the hypothesis of their eternal emptiness, help us in a positive way, but it can help us a great deal in a negative one. It enables us to discover with absolute precision what assumptions are implicit in the statements about economic causation (upon which action is often based) that politicians and other such persons are accustomed to make for the guidance of the public. When we are informed that a tax always raises the price of the taxed article by the amount of the tax, we know that our informant, though himself probably unaware of it, is tacitly assuming that all articles are produced under conditions of constant return. We know, therefore, that his statement is almost certainly untrue, and we also know what information we should need to have about any article subject to tax, in order to prophesy what the result on the price, at various intervals after the tax was imposed, would be. Dr. Clapham will hardly contend that this is unimportant. He will hardly deny that science may help practice by exposing the falsehoods of charlatanry as well as by itself discovering truths.

The second contention is that, even if they could be filled, knowledge about these boxes would have no practical usefulness. In discussing this contention I am again placed in something of a difficulty by Dr. Clapham's failure to clarify his own meaning. Of course, merely to know that a particular article—article, being a term used by shopkeepers, sounds more "realistic" than commodity—is being produced under conditions of increasing or diminishing returns is to know very little indeed about it. It is on a par with knowing merely that a man's temperature is above or below normal. To get any large and important guidance for practice we must know, or, at all events, we must have some rough general idea, as to *how much* above or below the normal it is. If we knew that the hat industry was being conducted under conditions of increasing or of diminishing returns, we should be able, it is true, to say *something* more about the effect to be expected from the imposition of a tax on hats than we can say now; we should be able to say, that is, whether, *other things being equal,*

a given tax would cause the price to go up by more or by less than the amount of the tax. But this is all we should be able to say. In order to get a definite result—to be able to say by how much, in actual pounds, shillings and pence, prices would go up,—we must know a great deal more than this. We must know the exact shape of the relevant part of the supply curve for hats and also the exact shape of the relevant part of the demand curve; in more general, if less exact, terms, we must know the numerical values of the elasticities of supply and demand for quantities of hats in the neighbourhood of the quantity that is actually being produced, and the relation of these elasticities to the passage of various intervals of time. Had Dr. Clapham pointed out that to know that a particular article is being produced under conditions of increasing or diminishing returns is not to know these things, and is, therefore, of little practical use, I should have agreed with him. But this is not his line of argument at all. He speaks as though increasing returns is one definite thing and diminishing returns another, whereas, in fact, each of these terms covers an infinite number of different things. The boxes between which the "analytics" are interested to draw distinctions are not, as he evidently supposes, the bulky valises displayed in their shop windows, but an intricate collection of little cases inside these, each labelled with a legend of the form "η lies between a and $(a + \Delta a)$ and e lies between b and $(b + \Delta b)$." Dr. Clapham does not say in so many words that the filling of these little cases would have no usefulness for practice, because he does not seem to realise that, inside the valises, there are any little cases. But the form of his argument suggests that, if he had realised that fact, he would have said this. At all events, in rebuttal of his view I wish to argue, not that the filling of the boxes would serve practice a great deal, but only that the filling of the little cases would do so.

Consider then his argument. For believing that the filling of the boxes would be of no appreciable use he adduces two reasons. First, he would not thereby be enabled to give any more advice than he can offer now to a manufacturer of woollen goods in the conduct of his business. Secondly, the information available to governments through the filling of the boxes would not, *by itself*, enable them to reach any political decisions. To the first of these reasons the answer is that it is not the business of economists to teach woollen manufacturers how to make and sell wool, or brewers how to make and sell beer, or any other business men how to do their job. If that was what we were out for, we should,

I imagine, immediately quit our desks and get somebody—doubtless at a heavy premium, for we should be thoroughly inefficient—to take us into his woollen mill or his brewery. The second reason is a remarkable one. Dr. Clapham has learnt from the *Principles of Economics* that, if we knew, as between two articles, that one was being produced under conditions of increasing and the other under conditions of diminishing returns, we could draw inferences that were relevant to the comparative effects on social welfare of putting taxes on the one or the other of them. Because there are also other considerations relevant to that problem, Dr. Clapham considers that this knowledge would be useless! What is there to say of reasoning of this quality? It is as though Dr. Clapham, in choosing between two suits of clothes (he will forgive the horrible suggestion that he might buy such things ready-made!), should refuse to inquire which of them will fit him best, because there is another consideration also relevant to his choice, namely, the amount of money that they respectively cost!

There remains the contention that the empty boxes cannot, in fact, be filled. Here I must point out that, had Dr. Clapham realised what the issue really was, he would have been able to strengthen his case very considerably. For, if it is difficult to decide whether a particular article falls into the increasing returns box or the diminishing returns box, *a fortiori* it is difficult to decide into which of the little cases inside these boxes it falls. I am very far from wishing to underrate the difficulty of this task: indeed I have myself more than once discussed and emphasised it.[1] None the less to declare, of a piece of work that has not yet been seriously tackled, that it is impossible, is, in my judgment, at least premature. Something, I believe, might be accomplished if economists would take counsel with leaders of business, expert in particular branches of production. Of course, if Dr. Clapham, or anybody else, goes to them and says, "My dear fellows, an 'analytic' up at Cambridge wants to know if your industries obey the laws of diminishing, constant or increasing returns," no great illumination is likely to result. But, if he were to ask them to discuss the conditions, as regards the relation between aggregate output and cost, under which various important articles have been and are being produced,—which is really asking a great deal more—I for one do not believe that he would always come empty away. Nor need we rely only on the general judgment of people expert in particular industries. There is

[1] Cf., *e.g.*, *The Economics of Welfare*, pp. 8–10.

already available a certain amount of statistical material—and we may reasonably hope that this material will both grow in quantity and improve in quality—from which students with the requisite mathematical equipment may make rough deductions about the shapes of certain supply schedules. On the side of demand something on these lines has already been accomplished. On the side of supply the task is undoubtedly more difficult. But we need not conclude that it is impossible. The hope of which I have just spoken, that better statistical material may presently be available for study, thus making the inquiry more feasible than it has been hitherto, should itself forbid that. There is, indeed, a lion in the path; the fact that those people—with the towering exception of Jevons—who have the qualities required for conducting a detailed intensive study of particular industries and writing monographs about them, are not usually well versed either in the more intricate parts of economic analysis or in modern statistical technique; while the "analytics" lack alike capacity and inclination for these detailed studies. For this there is only one real remedy. We must endeavour to train up more men of the calibre of Jevons, who are equally at home in both fields. Till we can accomplish that, the next best thing, for those lesser persons who are moderately qualified for the one sort of inquiry and for the other, is to work together in combination, and not to waste time in quarrelling, perhaps on the basis of an imperfect understanding, with the deficiencies of one another's methods.

A. C. Pigou

[For a rejoinder to this article by Dr. Clapham, see *Notes and Memoranda* below.]

PROFIT-SHARING AND COPARTNERSHIP

INCLUDING A STUDY OF THE RECENT COAL SETTLEMENT

MR. LLOYD GEORGE in the House of Commons on June 28th, 1921, said in reference to the Coal Settlement, "I feel very hopeful as to the result of this arrangement by which all the parties feel that they are copartners in this industry, that they have a direct interest in improving the conditions of things, that if they do not improve it their wages must necessarily be cut down, that if they do improve it their wages will go up, but that their wages as well as the profits of the owner depend upon improving the condition of things. That is the new element which has been introduced. . . . I believe it will open a new era of co-operation in this industry."

These are large claims and call for some attempt at examination. Fortunately there is a considerable mass of practical experience which throws a vivid light on the probability or otherwise of realising these claims. This experience is far too seldom consulted in the formation of new schemes. Profit-sharing as a solution of labour troubles has always been able to dazzle the eyes of the uninitiated, and since the days of Sedley Taylor its exponents have been many.

In the whole history of industry no case exists where profit-sharing has been applied in the way now established in the coal industry. There are, however, three cases which show some analogy to it. The first existed in the coal industry prior to the war, when wages were partly determined by fluctuations in the price of coal. The second existed, and still exists, in the iron and steel industry in Britain, where wages are fixed according to the average net selling price of the finished product. The last case is that of the gas industry in Britain, where over a large field the wages of labour and the dividends of capital are determined in inverse ratio to the selling-price. Apart from the fact that the principle embodied in the last case flies right in the teeth of that embodied in the other two, the similarity to the present coal settlement is only superficial. In each of the three above cases it is the price to the consumer that is used as the index to wages. In the first two cases, what was extracted from the consumer in increased price was shared between the employer and the

worker. In so far as the share which went to the worker would otherwise have gone to the coffers of the owner, this represents a share in profits. But only incidentally and under certain circumstances is this the case. A rise in prices may not mean increased profits, nor a reduction in price a reduction in profits. The obvious transfer was not of wealth from owner to worker, but from customer to worker. It was always to the worker's interest that prices be high, and this by itself is quite sufficient to cast some doubt on the principle.

The strange thing is that the very opposite principle was applied in the gas industry. The formal logician used to tell us that two opposites cannot both be true, but industry certainly acted as if they were. In the gas industry wages (and dividends) varied inversely to the price of gas per cubic foot. Of course, by wages is meant the total monetary remuneration of labour including standard wages and bonuses. Even in the case of the gas industry, this did not mean a direct sharing of profits. When prices went up, as they did during the war, dividends were in most cases reduced to about 3 per cent., and the bonuses to labour disappeared altogether. Labour did not in theory share so much in the profits as in the economies of production. When the consumer gained through reduced prices the worker also gained by increased bonus, and this knitting up of the consumers' and workers' interests was an excellent arrangement. But it was very far from representing an experiment along the lines of that now introduced into the coal industry. Besides the criterion of price being adopted, account must be taken of the fact that the gas industry is a special case. It is semi-monopolistic in character, it is regulated by statute, and it possesses, like co-operative industry, a large and assured market. These special characteristics cut this industry off from the main body of ordinary competitive undertakings, and spell caution in attempting to draw deductions from its experience. Again in the gas industry each unit stands by itself, there is a wide difference in details and no attempt is made to pool results. This is almost necessarily so when account is taken of the fact that each unit possesses a virtual local monopoly. Thus the Prime Minister was correct in stating that "no such principles have ever before been applied on so great a scale to a great industry."

The National Basis

In recent years, many prominent public men of all parties have advocated profit-sharing. Perhaps the best-known names

are those of Mr. Asquith, Lord Haldane, Lord Cowdray, Lord Robert Cecil, Mr. J. R. Clynes, and Mr. Herbert W. Jordan. Of these, Lord Robert Cecil and Mr. Jordan have definitely advocated the establishment of profit-sharing on a national basis. Not that, in either case, they suggest that a scheme should be made compulsory on industry. What they do suggest is that the Government should study closely the whole problem, formulate a model scheme, and use the influence it possesses through its conciliatory activities to induce employers and employees to adopt the model.

Though profit-sharing was first brought into prominence in France by a house-painter, Leclaire, commonly, though erroneously, called "the father of profit-sharing," still in no country in the world has it advanced more rapidly than in Britain. Switzerland, Holland, Belgium, Italy, Austria, Hungary, Germany, Spain, Portugal, Denmark, Canada, and the United States can all supply examples of profit-sharing schemes. In none of them, however, has this principle been made the subject of legislation to the extent of making it obligatory. This was attempted some twelve years ago in France, but ended in failure. Other proposals for the establishing of copartnership by Act of Parliament were made in France in 1906, in Massachusetts in 1912, and in the House of Commons Bill of the same year. The history of the French attempt is interesting and significant. In 1910 a Bill was introduced in the French Chamber of Deputies having for its object the compulsory administration of all French coal mines on a profit-sharing basis. This measure was a Government Bill and was strongly backed by the Ministers of Labour, Finance, and Public Works. A Committee was appointed to investigate the matter, and after visiting the mining districts it reported that no universal system was possible and that any attempt to enforce uniformity would inevitably result in the complete ruination of some undertakings. As both the coal-owners and the miners' unions were opposed to the Bill, it was finally dropped. Since that time several unsuccessful attempts have been made in France to encourage profit-sharing by legislative action, though no attempt has been made since to make the adoption of schemes obligatory. The encouragement consists in allowing the formation of new forms of companies, such as the proposed *Sociétés à participation ouvrière*, in extending to these the privileges accorded to co-operative productive societies, and in granting exemption from certain taxes. This is roughly the method suggested in Britain by Lord Robert Cecil, but so far in

France it has been opposed by the extreme wings on both sides, and has never been placed on the statute book.

The Present Coal Settlement

No direct legislative compulsion has been applied in the present case, though doubtless the offer by the Government of the ten million "in subvention of wages" was a strong inducement to the men to accept the terms of the owners. In theory, at any rate, we are left with a voluntary agreement on a profit-sharing basis. But when we try to probe beneath the surface the question becomes involved. Who asked for such a scheme? If not asked for, then who was its sponsor? Certainly the miners did not demand it, they asked specifically for a National Wages Pool, which in its operation is exactly the reverse of a District profit-sharing scheme. They asked that wages be made independent of the productivity of any particular district and that what was substantially an equalisation fund be formed from the excess accruing in favoured districts. Thus they demanded a scheme which freed any particular district from being subject to the profits made in it, and by their "voluntary" agreement they have accepted a scheme which directly bases wages on "the proceeds of the industry as ascertained in such district." It is therefore apparent that the miners have accepted the profit-sharing principle unwillingly as "the best they could get at the moment," as one of their leaders put it. This being so it need occasion no surprise that the miners proceed to look this gift horse in the mouth.

It would seem that the sponsors of profit-sharing have in this case been the owners or the Government, or both. There is little evidence that the owners are keen on this new principle, and there is a good deal to show that it was simply put forward as a smoke screen behind which the miners could hide their diminished heads. It is, for instance, loosely and carelessly drafted and occupies in volume less space than most schemes confined to single establishments. Already loud complaints are made by the men that the owners are not observing the spirit of the agreement. Now in these matters, as in most others, it is the spirit that quickeneth. No system or scheme, however good in itself, will ever work well unless it is administered honestly and sincerely. The history of profit-sharing amply illustrates this. Indeed, a close survey of schemes, successful and unsuccessful, or better, existing and abandoned, leads one almost to the conclusion that no scheme need fail if the spirit be good, and none will succeed if it be bad. The personal equation is, as ever, the

crucial one. Men can be led under the guidance of a powerful, magnetic, humane personality to carry any scheme to an enthusiastic success. Leclaire, Godin, Livesey, Taylor, Humphreys, and recently Mr. Austin Hopkinson were indeed captains of industry in the true sense, and could carry their crews successfully through almost any venture they inaugurated. Men have not forgotten how to follow if only they are well led. The Prime Minister was therefore correct in stating that "the whole success of this scheme depends on the spirit in which it is worked, and that constitutes an additional reason why nothing should be said that will tend to exasperate, irritate, or embarrass any of the parties." It is a melancholy reflection that already a good deal has been done which has exasperated one of the parties. Thus when the whole situation is reviewed there is a good deal to beget apprehension as to the future.

The Details of the Scheme

Apart from the all-important matter of the atmosphere into which the scheme is born, there is the question of its soundness in details. Does experience suggest that the system established in the coal trade is likely to succeed? Let us take each point in detail.

Firstly, it is a District scheme. The alternatives are a National or a Unitary one. Of a national scheme, we have no experience either at home or abroad, and everything points to the fact that such a scheme is both impossible and undesirable. Of unitary schemes, we have a large and varied experience since 1829. The respective merits of a district as against a unitary scheme is therefore the practical question at issue. In brief, it can be said that there is very little in a district scheme to commend it. It is more than sanguine, it is foolish to expect this to "open a new era of co-operation." Working for a district will never operate as a motive to effort. A miner may work for himself (including his family), his gang, his company, his industry, or for his country. Apart from abnormal war conditions, the further we move from the self-regarding motive the feebler the effort. Of course, it may be retorted that the miner is not asked to work for his district, but for his own interests as represented by the district interests. Suppose in each of the thirteen areas into which the coal industry is divided some 50,000 men are employed, can it be imagined that a miner will work harder because of the total extra proceeds of his area he will get a 1 : 50,000 part of the share allotted to wages, if there be any share at all? In the most comprehensive

and critical survey of profit-sharing issued up to the present it is stated "that the effectiveness of general profit-sharing is in direct relation to the rank of the participators, and in inverse relation to the size of the concern or of the participating group. This is a fact drawn from experience." It was found that in those businesses which were large the stimulating effects of sharing profits were not appreciable. What will they be when, not the single business, but a whole area is taken as the basis?

Secondly, the scheme in the coal industry is one for cash profit-sharing. By that is meant that any extra remuneration over standard wages is in the form of a cash payment. Clause 4 of the Terms of Settlement thus defines it:

"4 The sum to be applied in each district to the payment of wages above the standard wages as hereinafter defined shall be a sum equal to 83 per cent. of the surplus of such proceeds remaining after deduction therefrom of the amounts of the following items during the period of ascertainment:

(a) the cost of the standard wages;
(b) the costs of production other than wages;
(c) standard profits equivalent to 17 per cent. of the cost of the standard wages;

and the share of the surplus applicable to wages shall be expressed as a percentage upon the basis rates prevailing in the district."

The present point is that if any payment be made to the men at all it will take the form of a cash addition to the weekly pay envelope. Now if one thing can be proved more than another from the fifty-five years of experience in Britain of profit-sharing schemes, it is just this, that additional sums in cash are ineffective in promoting either greater efficiency or closer co-operation. The facts are these. Since 1865 some 238 cash profit-sharing plans have been started in the United Kingdom. Of these, 151 have already been abandoned, leaving 87 survivors. But of these, 54 have been inaugurated since 1910, most of them much more recently, and these cannot lay claim to have stood the test of time. Thus out of 184 such schemes begun before 1911 only 33 survive to-day. And of this "thin red line" it is known that not a few have succeeded in no other sense than that they have succeeded in surviving. They have become fossilised.

Yet in face of this direct evidence of failure we see still another cash profit-sharing scheme established and hailed by the Government as "a new system for the remuneration of the wage-earner."

The truth is exactly the reverse, and reminds us that much that is old must appear new to the ignorant. If any feature of the present coal scheme be new it is the district basis, and this is a cardinal error. The reasons lying behind the almost complete failure of cash profit-sharing are not difficult to find.

In the first place, the payment to labour is always exceedingly small. In 1918, the average bonus paid to the wage-earner under some 105 schemes was only £3 13*s.* 3*d.* For the whole period 1901–18, the ratio of bonus to wages reached only some 5·5 per cent. Moreover, in the vast majority of these schemes labour begins to participate in profits at a much earlier stage than it does under the present coal scheme. Indeed it will be a matter of surprise if there accrue for labour in the coal industry any divisible surplus at all. An industry that requires a Government subvention to pay reasonable wages is not likely to have any super-profit bonus to divide. Even if it had it would be ineffective. The fundamental fallacy lying behind the profit-sharing idea is that what stimulates one man to production will when divided among the many likewise stimulate the many. Two circumstances render this false. First, as mentioned above, the division means the reduction of the amount to a "minimal sensible." Secondly, and more fundamental, profit divided among many ownerless wage-earners ceases to be profit in any real sense. It partakes more of the nature of a dole, or a bribe, or a gratuity. That it is hardly profit in the commercial and industrial sense is proved by the fact that a reserve limit varying from 5 to 15 per cent. is set aside for the shareholders and has the prior claim on the surplus. After that the remaining surplus (if any) is divided between shareholders and workers. In the case of the coal settlement, this standard profit, equal to 17 per cent. of the cost of the standard wages, is further conserved by being made cumulative. Where there is no ownership, and no direct control and responsibility, there can be no real sense of profits. The men may receive sums of money, but they cannot be expected to regard these as profits in any vital sense.

Imagine a firm with 1000 employees, a capital of one million, and a profit of, say, £125,000 at the end of the year after all the usual funds have been provided for. Further, let us suppose that the typical profit-sharing arrangement obtains in the firm and that after 10 per cent. goes to capital as standard profits the rest is divided equally between capital and labour. Thus £100,000 goes to the shareholders plus half of the remaining £25,000, leaving £12,500 to be divided among the wage-earners,

giving an average of £12 10*s*. a head. With the typical wage-earner getting £250 a year this would represent the average of 5 per cent. Now it can be maintained that this £12 10*s*., equalling about 2½ weeks' wages, means a considerable addition to the worker's income and will win his interest and loyalty for his firm. Moreover, he will feel that his own extra exertion has earned this share for himself, and he will go forward with renewed zeal to the tasks allotted to him. He will feel a partner in the firm, a sharer in its gains, a sufferer by its losses, and this interest in the prosperity and well-being of " his " business will mean a new spirit of harmony, goodwill, and co-operation. This will mean harder work and greater efficiency, the jealous care of the firm's property, the prevention of waste, the reduction of labour turnover, the stability of the labour force, and above all will ensure the greatest blessing of all—industrial peace. All this is fine, but false.

There is, however, one small sphere in which experience approves of some of these claims. In so far as the staff are concerned, the managers, the executive employees—whether functional managers inside the firm, or buyers, sellers, heads of branch stores in a chain—among these cash profit-sharing has proved itself to be effective. The reasons why it succeeds in those cases indicate both its limitations and the causes of its failure when applied to the great mass of wage-earners. Discretionary employees are a small body of men, they more or less understand business and its fluctuations, they have an obvious and direct influence on profits, and can be suitably remunerated with advantage in proportion to them. All this is not true of the average wage-earner. Let us revert to the concrete case of John Smith, who gets his bonus of £12 10*s*. at Christmas, and try to understand his point of view. The gift is welcome, but he accepts it without gratitude. Employers have very often marvelled at the monstrous ingratitude of their workpeople on such occasions. An employer known to the writer doing a large importing business in Manchester presented his clerical staff with handsome bonuses ranging from £5 to £50. As all his staff had been with him for some time and were consequently known personally to him, he tried to allot the bonuses according to the individual circumstances of each, and thus to secure what he thought was absolute fairness. The day following the distribution he arrived at his office to find his two office boys rolling on the floor in a deadly feud. The *casus belli* was the bonus, one had received slightly more than the other, and they were testing

the employer's discrimination as to superiority at the bar of blows. There is a good deal of this boy nature in older and sober folk. This employer is determined never again to buy trouble which affected all his staff and resulted in continual bickerings at such a cost. This, unfortunately, is no isolated case. In all, 91 profit-sharing schemes have been discontinued because of the "dissatisfaction" of one or both parties with their operation. The lack of a thankful spirit on the part of the workers is due simply to the nature of the case. The impersonalisation of industry (gratitude to a board of directors is always difficult), the prevalent neutralising agent of suspicion and mistrust, the engendered thought that a firm which can present gifts can increase wages, all account for the absence of gratitude.

The Economic Stimulus

But if gratitude be absent, will the desire for an equal or greater bonus next year stimulate to effort? Will John Smith double his output with the idea of increasing his bonus next year? That all the circumstances are against this follows inevitably from a consideration of his point of view. The following are some of those considerations, as they appear to John Smith.

(1) After all, I may work doubly hard and get no bonus at all due to—

- (*a*) others not doing their share,
- (*b*) the mistakes of management,
- (*c*) bad trade,
- (*d*) new management,
- (*e*) trade union opposition.
- (*f*) being dismissed.

(2) In any case the reward is not only small, fluctuating, and problematic, but is also remote and deferred. If I work harder to-day I may months hence get my bonus. Is it worth it?

And if John Smith decides that it isn't, we need not be surprised. The fact is that cash profit-sharing by the rank and file is bound to be ineffectual because it gives the worker no permanent stake in the business, no ever-present possession of part of its capital, no increase in status, but merely throws him some crumbs of excess that fall from the table after the shareholders are satisfied. But even more important than this is the psychological attitude of the worker to his share. The worker has never been a profit-taker, and when he gets an "extra" he

is very prone to put it in one of the categories with which experience has made him familiar. If he had a share in the capital of the business he might have an opportunity of understanding what profits meant, but without this he is rather apt to be puzzled. The bonus will normally appeal to him as a payment for services, a deferred wage—a right, or alternatively as a windfall. If he thinks of it mainly as the latter, he suspects the motive behind it, and in any case while he accepts the gift will not like the fact that it is purely an "act of grace" on the part of the employer. He will wish it to be regularised and will argue that if the firm can afford to give away sums of money it can afford to pay higher wages—to the workman a preferable form of payment. If, on the other hand, the share of profits be looked on as a right, the worker will learn to expect it, will feel aggrieved if it be not forthcoming, or if its amount be reduced. This attitude of mind has been responsible for the wrecking of a great number of profit-sharing schemes and has jeopardised at one time or another the small minority that has survived. The case of Clarke, Nickolls, and Coombs, Ltd., London, may be taken as an example. In this case conditions have been unusually favourable, and for over thirty years a profit-sharing scheme has been in operation. On three occasions there has been a considerable reduction in the amount of bonus paid to its employees, and the firm report as follows: "These lean years were in each case due to special circumstances (*e.g.* the sugar tax) altogether outside our control. We are bound to record that the difficulty of reconciling the worker-beneficiaries to these drops in their bonus was (especially the first time) greater than we should either have expected or liked." Another significant case illustrating the failure of cash profit-sharing is that of Procter and Gamble, soap manufacturers, U.S.A. This firm began profit-sharing in 1887 in the belief that participation in the profits would in itself largely create a sense of common interest which would mean harmonious and contented service. The firm was, however, so disappointed with the results that they abandoned the profit-sharing scheme in favour of a system under which their employees had to qualify as participants by acquiring shares in the company under terms which compelled them to invest some part of their own savings. This scheme, which has been in operation since 1903, has proved very satisfactory.

It may seem at first sight that an inconsistency is involved in the above criticisms. If, as it is urged, the workers' bonus is almost always too small to be effective, how comes it about that

a diminution in the amount of this bonus causes irritation and strife? Surely if the bonus is in itself a "minimal sensible" any reduction must be even more so. This apparent inconsistency must lie equally on the shoulders of those who exhibit it in practice. But it must be observed that the stimulus necessary to induce men to work hard for a whole year may be very different both in amount and nature from that sufficient, in the present atmosphere of industry, to provide a *casus belli.* The case has been well illustrated in other walks of industrial life, and indeed it is the horns of the dilemma in the question of wages. Time and again it has been shown that while an increase in wages fails to stimulate output (as in the recent coal case), a reduction in wages never fails to irritate.

JAMES A. BOWIE

THE INCIDENCE OF UNEMPLOYMENT BY AGE AND SEX

It is somewhat remarkable that while insurance against unemployment, whether as a duty of State, industry or individual factory, has seemingly been introduced to stay, practically nothing scientific is yet known as to the incidence of unemployment by age and sex. Nor is this because inquiry has shown there is nothing scientific to know, but rather to a total absence of inquiry owing to the impossibility in the past of obtaining statistics on the subject. Inference is still the only source of information on this important and interesting subject; inference which really amounts to no more than a shrewd guess that during any protracted period of trade depression unemployment will bear most heavily upon the young and the old.

This conclusion, of course, does not neglect the obvious influence on unemployment of defects in personal character, but it assumes that the " misfits " are distributed in fairly equal proportion at all ages, so that this element may be disregarded by cancellation. Assuming this, the argument is that in bad times staff is first curtailed by cutting down the normal quota of new recruits. Unemployment increases suddenly, in the absence of an apprenticeship system, among those who are of an age to enter industry and who would in normal times be absorbed by industry as a matter of course. But as the depression continues the employer cannot content himself with this negative economy; he must also dispense with many of the satisfactory workers already on his pay-roll. Here, other things being equal, the pressure is supposed to be heaviest on the old. Those for whom the weight of years has sapped physical strength or dulled manual and mental nimbleness will be discharged in numbers. Without any important discrimination as to sex, it is commonly accepted as a general principle that during a depression unemployment will begin by bearing heavily on the two extremes of adult life, and will gradually work in from either end to those in their prime.

An incidental advantage of the existence of a national system of Employment Exchanges is that it has been possible to test the validity of this conclusion for Great Britain during the

period of post-war depression. Early in February 1922 a classification of claimants to unemployment benefit by age, sex and marital state was made at all local Employment Exchanges in Great Britain and Southern Ireland. At the time of the inquiry the trade depression had existed in marked degree for nearly a year and a half, and it might be supposed that the conclusion set down above would have been justified thereby. Such, however, was the case only with several very important limitations.

The investigation was restricted to those adults (eighteen years of age and over) claiming benefit in respect of total unemployment, and covered 1,681,936 men and women. Thus a very high proportion of all adults of whose unemployment there was any record on February 7, 1922, was included, as is seen from the following figures:

	Covered by Inquiry of Feb. 7, 1922.	On Live Register, Feb. 7, 1922.[1]	Unemployment Books lodged Feb. 7, 1922.[1]
Men	1,389,673	1,417,767 [2]	—
Women	292,263	313,971	—
Boys	—	61,853	—
Girls	—	46,727	—
Total	1,681,936	1,843,318 [2]	1,859,905

Of the cases investigated 14,799 were reported as not available for analysis, and 32,143 more were unaccounted for. The 1,634,994 cases analysed, therefore, form 97·2 per cent. of the total of 1,681,936 covered by the inquiry; and form 94·4 per cent. of the total of 1,731,738 adults on the Live Register at the time of the inquiry. The total number of persons insured against unemployment at the time in the area covered was estimated at 10,515,000, and there is no reason to doubt the substantial accuracy of this estimate, based as it is on the number of unemployment books issued to those engaged in insured occupations. Table I gives the total number of male and female claimants by age-groups.

Not only the national returns, but also those of certain selected localities are presented graphically in Chart I. This gives, for men and women separately, the curve of unemploy-

[1] Exclusive of Northern Ireland.

[2] Exclusive of an estimated number of 30,000 classified casual workers (mainly registered dockers). Classified casual workers are not included in either the first or third columns of the above table, and have therefore been excluded from the Live Register figures. The total number on the special casual register of the Exchanges for Great Britain and all of Ireland on Feb. 7, 1922, was 35,173.

ment in (*a*) Great Britain and Southern Ireland as a whole; (*b*) the city of Liverpool, excluding dock labour; (*c*) the town (not county borough) of Stoke-on-Trent; and (*d*) the two East End boroughs of Shoreditch and Bethnal Green in London. These particular localities were selected because of the different industrial characteristics which they represent, the four curves indicating respectively the incidence of unemployment at different ages (*a*) in the country as a whole; (*b*) in a population predominantly clerical; (*c*) in a population predominantly engaged

TABLE I.

National Unemployment by Age and Sex (*February* 7, 1922).

Age-Group.	Male Benefit Claimants.		Female Benefit Claimants.		All Claimants.	
	Number.	Per-centage.	Number.	Per-centage.	Number.	Per-centage.
18–19	99,310	7·4	48,603	16·9	147,913	9·0
20–24	246,501	18·3	85,529	29·8	332,030	20·3
25–29	189,374	14·0	47,294	16·5	236,668	14·5
30–34	148,625	11·0	29,829	10·4	178,454	10·9
35–39	128,223	9·5	23,197	8·1	151,420	9·3
40–44	123,359	9·1	17,660	6·2	141,019	8·6
45–49	119,738	8·9	14,247	5·0	133,982	8·2
50–54	102,867	7·6	9,262	3·2	112,129	6·9
55–59	81,611	6·1	6,035	2·1	87,646	5·4
60–64	60,652	4·5	3,498	1·2	64,150	3·9
65–69	39,921	3·0	1,647	0·6	41,568	2·5
70 and upward	7,896	0·6	119	0·0	8,015	0·5
Total analysed	1,348,077	100·0	286,917	100·0	1,634,994	100·0

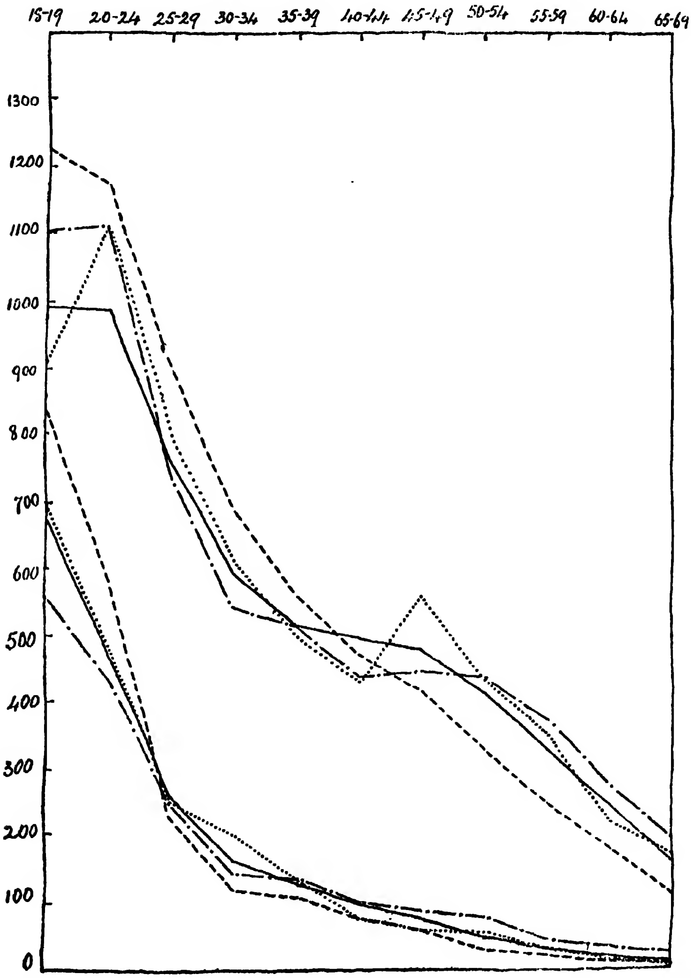
in a single industry (pottery); and (*d*) in a typical slum area where a predominantly unskilled population is fairly evenly distributed between the tobacco, clothing, boot and shoe, and cabinet-making industries. For purposes of comparison the curves, which were first calculated separately, have been brought in Chart I to a common scale. In the case of Liverpool alone the chart presents actual numbers of claimants to benefit.

The first phenomenon brought out by this chart is that with few exceptions there is a general similarity in the slope of the different curves for each sex. The outstanding divergence is among men at the age-group 45–49. Here the curves for the two predominantly industrial communities both rise, markedly in the case of the skilled population (Stoke), perceptibly in the

case of the unskilled (Shoreditch and Bethnal Green), while the downward trend of the curve representing the predominantly

CHART I.

National and Local Unemployment by Age and Sex
((February 7, 1922).



The upper group of curves shows the relative variation in the number of male claimants to unemployment benefit at successive ages. The lower group of curves shows the same for female claimants. The chart shows actual numbers of unemployed only in the case of the Liverpool curves.

– – – – – Liverpool ——·—— Shoreditch ———— National .... Stoke

clerical population (Liverpool) is barely deflected. This emphasises the obvious inference that the coming of middle age

brings a greater risk of unemployment to the industrial than to the clerical worker, although it would be unsafe to assume from the figures on which this chart is based that this risk is greater among skilled than unskilled industrial workers.[1] But in the main it is noticeable that all four curves in each set taken separately present a similar alteration of slope at successive age-groups. Furthermore, in spite of initial separation, the curves exhibit a marked tendency to converge, particularly in the female group. The main inference from the general uniformity of slope and the convergence in each sex-group is that the depression induced a tendency to equality of unemployment in the districts under consideration, and that the greater or lesser risk of unemployment varied quite as strikingly by age as by occupation.

A second phenomenon brought out by Chart I is the discrepancy between the actual course of the curves and the course which the diminution of the gainfully occupied population in each successive age-group would lead us to expect. With an age distribution of unemployment proportionate to the age distribution of the occupied population the male curves would slope downward almost uniformly with increasing age. In the female curves we should expect a sharper drop in the early age-groups, because of the large number of women who work before and not after marriage, but after the early thirties we would expect the decline to be much the same as in the case of males. What actually happens in the female group is akin to this, but in obviously exaggerated form. The curves representing female unemployment drop as much too quickly in the early age-groups as they drop too slowly in the later age-groups, giving the impression that unemployment is unduly bad among young women, and unduly good (if the expression may be permitted) among women past thirty. A similar analysis applied to the course taken by the group of male curves shows that these differ even more widely from expectation. Although we have as yet no information of the relation between the numbers of unemployed and the numbers of wage-earners at each age-group, we can already hazard the opinion that there are definite foci in the working life at which unemployment bears much more heavily than at other ages.

A third phenomenon worthy of notice in Chart I is the contrast in the general courses followed by the two groups of curves.

[1] Because of the small numbers involved—a total of 1882 men and 1056 women—the Stoke curve is more liable to inaccuracy than the others.

The evidence here is that the risk of unemployment is frequently quite different for men and women of the same age.

In addition to these general observations a few interesting inferences may justifiably be made from the course of the local curves of male unemployment between the age-groups 30–34 and 50–54. One is that for industrial workers there lies between the early forties and the early fifties a very distinct danger period of unemployment. Another inference is that there is no such special danger period then, nor at any other age, for clerical workers. A third inference, drawn from the Shoreditch and Bethnal Green curve, is that in a predominantly unskilled population the uncertainty of employment which was pronounced in the early twenties was resumed in the early thirties during the depression period.

These inferences cannot be regarded as definite conclusions, but the evidence brought out by the statistics is so strongly corroborated by the observations of individual Employment Exchange managers that they must be taken as something a good deal more than mere surmise. Further research on the incidence of unemployment by age and sex in different occupations is badly needed, for it is obviously an essential preliminary to the treatment of the whole problem of unemployment on a scientific basis.

In order to ascertain the real severity of unemployment at any particular age a comparison between the number of unemployed in each age-group and the total number of "occupied persons" (both employed and seeking employment) is needed. Unfortunately the Census returns for 1921 have not, at the time of writing, been classified according to occupation and age distribution. But on the assumption that even the events of the 1911–1921 decade will be found to have affected the age distribution of the industrial population relatively little, the following table has been prepared showing the ratio of distribution of unemployment in insured trades in February 1922, to the distribution of the occupied population in these same trades in 1911.[1]

[1] The reasoning which permits the conclusions from this table to be regarded as valid is as follows. Between 1911 and 1921 the total population of Great Britain increased by 676,176 males and 1,259,958 females. When, on the one hand, the low birth-rate during the war period, and on the other hand the five-year stoppage of emigration, is taken into consideration, it is obvious that the numbers of adult males in the age-groups in question cannot show net change of any magnitude. While the numbers of adult females in these age-groups has certainly increased, the gain is probably fairly well distributed, although greatest in the early adult age-groups.

As the insured trades cover practically the entire industrial population,

TABLE II.

Distribution of Unemployment (February 1922) and Distribution of Occupied Population (April 1911).

		Under 20.	20 and under 25.	25 and under 35.	35 and under 45.	45 and under 55.	55 and under 65.	65 and over.	Total.
Married Men	Number	2,303	49,711	194,274	183,505	167,642	107,934	36,353	741,722
	Rate per 1000 of persons claiming benefit	3	67	262	247	226	146	49	1,000
	Rate per 1000 of occupied population	1	36	286	306	215	116	40	1,000
Single Men	Number	97,007	196,790	143,725	68,077	54,963	34,329	11,464	606,355
	Rate per 1000 of persons claiming benefit	160	325	237	112	90	57	19	1,000
	Rate per 1000 of occupied population	155	313	271	107	70	51	33	1,000
Total Men	Number	99,310	246,501	337,999	251,582	222,605	142,263	47,817	1,348,077
	Rate per 1000 of persons claiming benefit	74	183	251	187	165	105	35	1,000
	Rate per 1000 of occupied population	61	144	280	228	158	91	38	1,000
Married Women	Number	1,982	19,344	39,412	29,328	18,137	7,180	1,342	116,725
	Rate per 1000 of persons claiming benefit	17	166	338	251	155	61	12	1,000
	Rate per 1000 of occupied population	3	52	225	259	228	152	81	1,000
Single Women	Number	46,621	66,185	37,711	11,529	5,369	2,353	424	170,192
	Rate per 1000 of persons claiming benefit	274	389	221	68	32	14	2	1,000
	Rate per 1000 of occupied population	171	338	282	113	60	26	10	1,000
Total Women	Number	48,603	85,529	77,123	40,857	23,506	9,533	1,766	286,917
	Rate per 1000 of persons claiming benefit	170	298	269	142	82	33	6	1,000
	Rate per 1000 of occupied population	114	242	263	162	116	69	34	1,000
Total Men and Women	Number	147,913	332,030	415,122	292,439	246,111	151,796	49,583	1,634,994
	Rate per 1000 of persons claiming benefit	90	203	254	179	151	93	30	1,000
	Rate per 1000 of occupied population	74	168	276	212	148	85	37	1,000

Perhaps the most striking information afforded by this table is the different incidence of unemployment on men and women of the same age. Among women the proportion of those unemployed heavily exceeds the proportion of those occupied in the first two age-groups; exceeds slightly in the third age-group, and falls below in the four remaining age-groups. Among men the proportion of unemployment is also in excess (though in less degree than for women) in the first two age-groups; falls well below the mean in the 25 to 44 period, is in excess again in the next two age-groups, and is very slightly below the mean in the last. The extent of the divergences from the mean (per 1000) are summarised below:

TABLE III.

Variation in Ratio of Unemployment.

Age-Group.	Men.	Women.	Percentage of Sex Divergence.
Under 20	+13	+56	Women in excess by 4·3 per cent.
20–24	+39	+56	" " 1·7 "
25–34	−29	+6	" " 3·5 "
35–44	−41	−20	" " 2·1 "
45–54	+7	−34	Men in excess by 4·1 "
55–64	+11	−36	" " 5·0 "
65 and over	−3	−28	" " 2·5 "

Very noticeable is the high rate of unemployment revealed

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shifts in industrial occupation since 1911 are without effect in this table. And it is safe to assume that the pressure of industrial unemployment had before February 1922 fully counteracted the war-time drift from agriculture and domestic service (non-insured) to industry.

The ratio of distribution of occupied population between different age-groups, which is the important matter, has altered to some extent. In 1922 in the case of males it was doubtless somewhat less per 1000 in the age-groups 20 to 45, and somewhat higher in the "under 20" and "45 and over" age-groups. In the case of females it was undoubtedly somewhat higher per 1000 in the earlier age-groups considered, and lower in the later.

Table II and Chart II, therefore, tend to exaggerate somewhat the incidence of female unemployment in the early age-groups, and to under-estimate it somewhat in the later age-groups. They slightly under-estimate male unemployment between the ages 20 and 45, and over-estimate it at other ages. But even the actual alteration in the age distribution of occupied population in this decade is much less than first thoughts would indicate, and when reduced to a per thousand rate it will be found surprisingly small. Experimental calculations indicate that in extreme cases the difference will not amount to 5 per 1000.

Consequently it may be assumed that the margin of error caused by comparing the age distribution of unemployment in 1922 with the age distribution of occupied population in 1911 is too small, even if it were not hereafter reckoned with, to invalidate any of the general conclusions drawn from the comparison.

in the earlier age-groups. As shown above, this is even more marked in the case of women than of men.[1]

While it is not the purpose of this inquiry to attempt any analysis of the bearing of marital state on unemployment, it is of interest to note that married persons contribute heavily to this high rate of unemployment in the earlier age-groups. Thus in the age-group 20–24 the rate of unemployment among married men was nearly double, and among married women more than treble the proportion which those groups formed of the occupied population in 1911. The excess of unemployment among single persons at these ages was much less marked.

It should be observed also that the proportion of unemployment among men is greater in both the earlier and later age-groups than might be expected from the proportions of the occupied population in these groups. In the case of women the higher unemployment is confined to the earlier age-groups. That unemployment, taking the sexes as a whole, was proportionately heavier among men is shown by the following statistics:

On February 7, 1922.	Men.	Women.	Total.
Persons Insured	73·2%	26·8%	100%
Persons Claiming Benefit	82·5%	17·5%	100%

With the assistance of Chart II, which presents the information contained in Table II in graphic form, an analysis can now be given showing how the incidence of unemployment varied between different age-groups at a time when the post-war depression was at its height. Table IV is based on Table III, but is worked out in more detail, and makes allowance for the probable alterations in the distribution of occupied population since 1911.[2] It must be remembered that this table only shows the condition of employment at each age-group in comparison with the condition which might have been expected at a time when employment at every age was subnormal. To

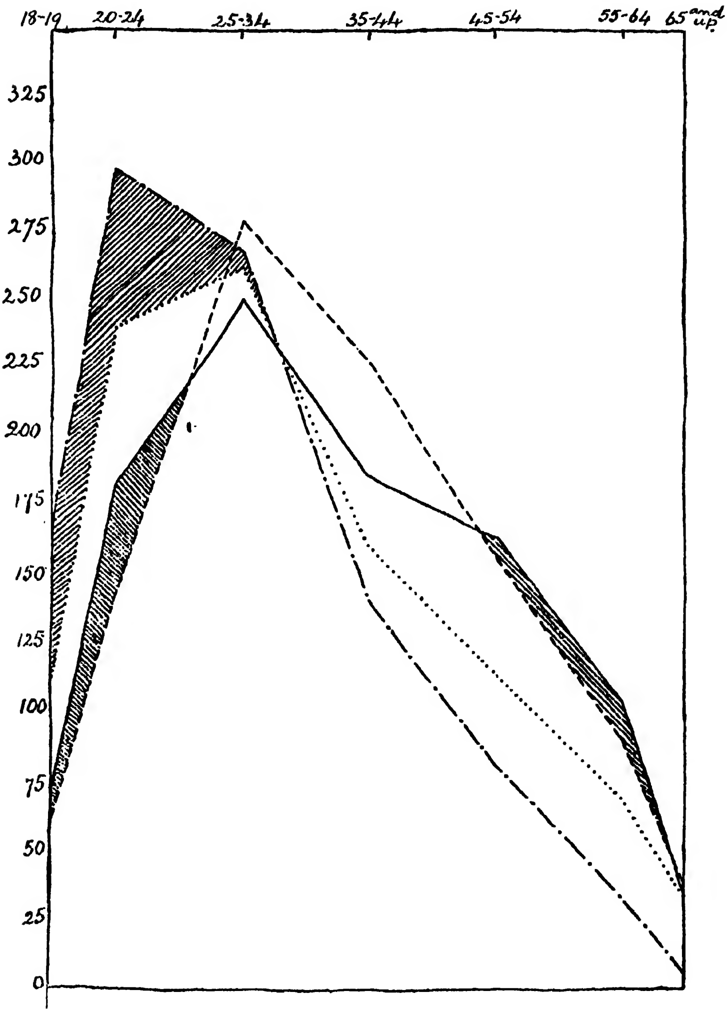
[1] It is advisable at this point to meet probable objections arising from the fallacy that women are more likely than men to mis-state their ages. At both the 1901 and 1911 Censuses in Great Britain females were found to give their ages slightly more accurately than males. In 1911 mis-statements by males of fourteen years of age and over were estimated at 1·786 per cent. of the population; by females at 1·735 per cent. The percentage of error from age mis-statement is so small as to be practically negligible, and is furthermore virtually the same for both sexes (cf. Cmd. 6610, pp. xlvii–xlviii).

As ages ending in 0 and 8 have been found by the Census statisticians to contain the bulk of these mis-statements, the tables in this article employ a quinquennial age-group which separates these two most inflated values.

[2] See footnote on pp. 482 and 484.

CHART II.

Distribution of Unemployment (February 1922) and Distribution of Occupied Population (April 1911).



The horizontal scale shows rates per thousand (*a*) of those unemployed, and (*b*) of those normally engaged (" occupied ") in the same trades (cf. Table II). The shaded areas, where for each sex the curve representing the ratio of unemployment is above the curve representing the ratio of occupied population, indicate the age extent of very excessive unemployment; the upper area for women, the two lower areas for men.

Female Unemployment	.... Female Occupied Population
Male Unemployment	------ Male Occupied Population

say, for instance, that employment among men of 40 to 44 inclusive was "very much above average," means here only very much above average considering the state of unemployment as a whole. It by no means necessarily indicates that employment at this age was actually good. Where, on the other hand, a condition of employment was even "somewhat below average," it is definite proof that unemployment in that age-group was unusually severe. The standard of measurement taken is a low one. This being understood, the condition of employment for each sex at different ages may be summed up as follows:

TABLE IV.

Conditions of Employment with Reference to Average at Time of Inquiry.

Ages.	Men.	Women.
18–19	Somewhat below average	Very much below average
20–24	Very much below average	Very much below average
25–29	Somewhat below average	Considerably below average
30–34	Considerably above average	Average
35–39	Considerably above average	Average
40–44	Very much above average	Somewhat above average
45–49	Somewhat above average	Considerably above average
50–54	Average	Considerably above average
55–59	Somewhat below average	Considerably above average
60–64	Somewhat below average	Considerably above average
65–69	Average	Considerably above average

From the evidence which has been set out in some detail, and from the corroboration of it which is given by those who are in daily contact with the post-war unemployment problem in Great Britain, it is now possible to draw a number of definite conclusions as to the incidence of unemployment by age and sex during the height of the depression period. These conclusions are as follows:

(1) Even at a time when employment seems uniformly bad the risk of unemployment varies very greatly between different ages.

(2) At the same ages the risk of unemployment always varies between the two sexes. It is most similar in the age-groups 20–24 (employment very bad for both sexes) and 40–44 (employment fairly good for both sexes, judging by a low standard).

(3) The incidence of unemployment by age varies more markedly between different occupations in the case of men.

(4) Among men the maximum risk of unemployment is not among the very young nor the elderly. It is found in the early twenties, among those who had left school six to ten years before this maximum risk developed.

(5) Extreme unemployment among men is found in both the early and later age-groups. Employment among men is at its best between the early thirties and the middle forties.

(6) Among women the maximum risk of unemployment is from eighteen to the middle twenties.

(7) Extreme unemployment among women is found only in the early age-groups, but continues severe until the early thirties. Employment among women is best from the early forties on.

(8) Taking all ages into consideration unemployment is disproportionately worse among men than among women.

Certain of these conditions number 4, for instance—are obviously influenced by the effects of the war. On the other hand, war effects have only emphasised tendencies to unemployment, such as the lack of industrial training among young men too old for "blind alley" work, which are always latent. It is probable that additional research on the incidence of unemployment by age and sex will confirm the above conclusions as to the situation during a period of severe depression. If so, their utilitarian value for a more scientific programme of unemployment relief is obvious.

FELIX MORLEY

THE SURVIVAL OF THE SMALL UNIT IN INDUSTRY

The fifty-four reports of the Standing Committee on Prices cover a wide range of industries. In the course of the investigations into the alleged undue raising of prices, many industrial aspects were touched upon, including the size of the producing unit in different trades.

Such information is far from exhaustive,—industries known to contain many small firms, such as chain-making, were not investigated, and in others, as in brush-making, the reports do not happen to mention the sizes of the firms,—yet, it has seemed to be worth while collecting these somewhat random facts because of the social value of the smaller unit and the paucity of information available regarding its survival.

In the past the small firm has enabled countless clever and ambitious workmen to become their own masters. As late as 1912 Professor Chapman [1] stated, as the result of personal inquiries in a "well-known cotton manufacturing town," that 88 per cent. of the employers, owning 49 per cent. of the looms, were employers of the first generation. He quotes the opinions of Trade Union officials and other authorities, "that there exists a free channel of not insignificant dimensions through which the directing classes are continually being recruited from the wage-earning classes." The present wave of industrial unrest emphasises the importance of the existence of such a channel.

On the other hand, in many trades there is an unfortunate connection between a certain type of small employer and the sweating system.[2]

In 1897 it was estimated that 36,000 factories and workshops employed not more than five workers apiece,[3] and even about 1913, "In the majority of trades the number of persons employed

[1] See article on the Average Size of the Industrial Unit, *Statistical Journal*, 1912, p. 469.

[2] See 1906 return by local authorities of inspections under the 1901 Factory and Workshops Act.

[3] Hansard, 25/5/08, col. 719.

per establishment commonly falls below twenty."[1] But unfortunately there is little detailed statistical information available. ("I think I must say that practically we have no reliable statistics of the number of domestic factories and workshops": evidence of the principal clerk in charge of the Home Office[2] before the 1907 Committee on Home Work.) Only the average sizes of firms can be worked out from the factory returns, and they are of little use for purposes of comparison from year to year, because the extension of the scope of the Factory Acts and the increased use of power tend to bring more and more of the existing small firms within their jurisdiction;[3] and since 1914 their statistical tables have been considerably reduced. Professor Chapman has shown[4] how valuable is the information contained in trade directories, but has worked it out fully only in the case of the textile industries.

These reports by the Standing Committee on prices not only give fuller information, they also carry it on through the War and post-War periods.

The following industries are definitely of the small unit type.

> "The clog-making industry,[5] so far as clogs used in England are concerned, is in the hands of very small concerns. There are factories for making clogs by machinery, but the product of these establishments is exported, and about 95 per cent. of the clogs used in this country are produced in the small establishments run by master cloggers. The master clogger rarely employs more than three workmen, and a large proportion of his time is spent in executing repairs. Clogs are manufactured in many cases to order as time allows, but repairs fill a large part of the working hours."

In bacon curing[6] the small unit flourishes. There are 3,000 curers, only sixty of whom are of considerable size, and even Messrs. Harris, the largest firm of all, "does not by any means dominate the Wiltshire trade."

In the case of meat[7] the sub-committee investigated the relation between the home producers, who appear to be small

[1] Mr. G. I. H. Lloyd, *The Cutlery Trades*, p. 425.

[2] Mr. Delevigne.

[3] The 1910 report in one place records that inspectors noticed a striking decline in the number of small laundries, and in another that, owing to the extension of the application of the Acts, there had been a considerable increase in the number of these establishments that had to be inspected. For increased use of power see reports for 1903, '4, '7 and '8.

[4] "Average Size of the Industrial Unit," *Statistical Journal*, 1912, p. 469.

[5] Cmd. 541. Report on clog-making.

[6] Final report on meat. Cmd. 1356.

[7] Cmd. 1057 and Cmd. 1356.

units,[1] and the import trade, which is highly trustified, and which controls 45 per cent. of all the meat consumed in London.

> "The representatives of the trade whom we questioned were unanimously of opinion that it was impossible even for the strongest combination to control prices in Smithfield for more than a few days, partly because of climatic reasons and the deterioration of chilled beef in cold storage forced quick sales, partly because a rise in prices speedily evoked an increased supply of home-raised meat."

The Committee agreed that so far the importers had not inflicted "material injury" to the home trade, although they had kept down prices, but considered that, should they extend their operations, they "may be able to divert necessary supplies from this country and control distributive businesses in the United Kingdom."

In Preserve-making[2] there are "between four and five hundred jam manufacturing firms in this country," and the only combine, that of Messrs. Crosse and Blackwell,—which includes the well-known firms of Keiller, Lazenby, Cosmelli, Kellie, Batger, Cairns and others, and produces one-fifth or one-sixth of the total national output,—is said not to have any effect upon price-fixing.

In the Fishing Industry[3] the relative advantages of small and large scale production are discussed.

> "Broadly speaking, white fish is caught by four methods :
>
> (1) In nets by efficient and large steam trawlers.
> (2) In nets by small steam and motor vessels.
> (3) In nets by sailing trawlers.
> (4) On lines by small craft.
>
> The first method is the most economical in cost. These large vessels go to sea for extended periods, lasting from four to five days generally, and upwards to three weeks when the Icelandic or Moroccan grounds are worked. The fish is kept on ice, and when landed is in good condition, though naturally not so firm and fresh as if it had been landed soon after being caught. The fish is landed in large quantities and the production cost is low. The other methods are more costly. The area of ground which can be fished is limited by the mobility

[1] These reports do not give the number of graziers, and in the Census they are placed under the heading of "farmers, etc."; but animals destined for food must doubtless be raised on a large proportion of the country's 516,704 agricultural holdings. The 1911 census gives the number of butchers as 20,960. The main wholesale London Trade at Smithfield market is handled by 210 firms, 143 of whom hold but one stall in the market (1908-9, Departmental Committee on Combination in the Meat Trade).

[2] Cmd. 878. [3] Cmd. 574.

of the craft and the landings are comparatively small. Still, if there is no unreasonable delay in returning to port, the fish is landed in fine condition and is often sold 'round' (without the gut and offal being removed). Only the freshest fish can be marketed in this manner, and customers who have access to the markets where these qualities of fish are available will often refuse any but 'round' fish. It seems clear, therefore, that, speaking generally, the vessels that produce most cheaply do not land the best quality of fish, whilst the less efficient craft bring to market fish of a quality commanding a better price than that which the former might expect."

Smaller units are also favoured by the individual circumstances of the trade in the making of Agricultural Implements.[1]

"The English firms are comparatively small, standardisation is not general, and though quality is good, costs are consequently high. . . . Broadly speaking it is true to say that the Americans standardise, while the British makers favour special types. The varieties of soil and conditions in England enable the makers in this country to hold their own to a considerable extent in the face of American competition, so far as the domestic market is concerned, but the Americans control practically the whole of the export trade."

In the case of Vinegar[2] the "domestic" branch of the industry has encroached upon the factory method.

To brew vinegar "requires an expensive plant, the maintenance of a brewery, and, before the brewed vinegar is passed out for sale, the whole process, including maturing, requires many months and a considerable expenditure in labour and fuel."[3]

Since about 1901 the introduction of "wood," "unbrewed" or "artificial" vinegar has hit the older trade severely. It is made "by the simple dilution of acetic acid with water and the addition of caramel," and only experts can taste the difference.[1]

"Unbrewed vinegar is easily made on a small scale in domestic fashion, without any works maintenance or appreciable outlay of capital. For this reason those large makers who produce unbrewed vinegar are not usually able to compete outside their own territory and supply chiefly local requirements. So long as any small trader can, on his own premises, produce unbrewed vinegar at a cost not appreciably higher than that at which the larger makers can produce, there is obviously little or no possibility of makers selling such vinegar

[1] Cmd. 1315. [2] Cmd. 1355.

[3] The fourteen firms in the Trade Association produce 50 per cent. of the total output of the country, and there are eight or ten large firms outside.

[4] Costs of production per gallon: brewed vinegar, 1*s*. 3*d*. to 1*s*. 4*d*.; unbrewed 7*d*. to 8*d*. Selling price: brewed vinegar, 1*s*. 10*d*.; unbrewed, 1*s*. 2*d*., or 1*s*. 3*d*.

in a district which necessitates any considerable expenditure in distributive costs."

In the Furniture trade,[1] factories, workshops, and "garret workshops" were found.

> "Contrary to the general principle of industrial evolution, which assumes higher efficiency with greater concentration, the economic unit in furniture manufacturing remains the small master, who, in his turn, has to compete with the independent worker, producing on his own account in the back-room or back-yard of his own dwelling."

Such workers have always been "prevalent" in the trade, and

> "One of the consequences of the recent higher prices is that enterprising workmen have ceased working for a small master and have commenced in a small way on their own, with, in most cases, limited stock, capital and appliances. These men sometimes employ a few hands, and, in view of the fact that they do not have to bear the heavy oncosts and overhead charges of the larger makers, are in a position to sell below the latter's price. These small makers, being their own masters, work up to sixty and sometimes more hours per week. Many of their goods are sold 'in the white' to larger firms who do the polishing and general finishing-off.
>
> "The furnishing industry, indeed, is, in effect, an illustration of the theory now generally accepted, that there is a growth of specialisation no less striking than the growth of standardisation, and that while the latter more and more tends to centralisation and mass production, the former retains the subdivided form of industry, and affords scope for the small master and individual producer. Certain economic factors aid this development, as, for instance, the availability of electric power in the small workshop."

Windsor and Cane-seated Chairs are made at High Wycombe. There was severe competition before the War. Manufacturers either made the chairs throughout in their factories, or assembled and completed them from parts made in outlying workshops. The present high prices have encouraged these workshops to complete the chairs themselves. "The method of production and distribution at the present time may be summarised into three grades." Chairs made in the village workshops sold at 6*s.*; chairs, the parts of which are made in workshops, but which are completed in High Wycombe factories, sold at 7*s.*; chairs wholly made in these factories sold at 7*s.* 9*d.*

Cheap Parlour Suites, covered in American cloth, are manufactured "in many districts by the large firms and the smaller

[1] Cmd. 983.

workshops, the latter being controlled by small master men with a few workpeople."

Bedroom Suites in Oak and Satin Walnut

> "are made by all classes of manufacturers, from the largest factories in the country to small back-room workshops. In a number of cases it was found that certain firms purchased their suites 'in the white' . . . and then finished and polished the suites for re-sale. It has been ascertained that sometimes the firm supplies the timber to the small manufacturer, who makes the suite and returns it to the original firm who supplied the timber, thus simply being paid for his labour and profit."

Common Deal Furniture "is made by the smaller manufacturer."

In Biscuit-making [1] the smaller units are less successful.

> "The number of important firms is small, and most of these manufacture not only biscuits, but also confectionery, chocolates, etc."

The accounts of six of the largest firms were investigated, and it was found that the profits earned on these other products were very much higher than those earned from the sale of food biscuits. "There must be a number of small firms whose results are unlikely to be as favourable as these."

In the Broom and Brush Trade, according to the 1902 Factory Report,[2] the small workshops of South-East London, where it used to be localised, were declining: "The small manufacturer with limited means is as little able to compete with a large firm (employing all the newest machinery) as he is with the foreign importer of cheaper brushes."

Yet these smaller occupiers did manage to survive, for the Profiteering Report [3] states that machinery only became general during the War: "In contrast to the pre-War practice, when only a few factories were producing by machinery."

The reports also indicate the number of small firms existing in some of the industries dominated by combines.

There are 220 soap-makers in the United Kingdom.[4] Thirty-nine of the firms belong to the Lever combine, which produces 70 to 75 per cent. of the country's total output. Forty-three lesser firms are to be found in the Yorkshire district; these largely specialise in textile soap, and produce about 6 per cent. of the national output.

> "We are informed that competition in textile soaps is keen, and that the margin of profit to the small-scale

[1] Cmd. 856. [2] P. 207. [3] Cmd. 1275. [4] Cmd. 1126.

manufacturer is so low as not to justify the continuance of manufacture. Most small textile soap-makers, however, deal in oil and other commodities for the textile trade, and find it an advantage in the maintenance of their general business connections to manufacture soap. Their production is small and appears to be comparatively costly."

Of small soap-makers in general the report says:

> "Though there are many such makers they are (with only one or two exceptions) individually unimportant, and indeed, to a large extent, owe their continued existence, Lord Leverhulme himself informed us, to the small scale of their operations and a certain economy in production and distribution based upon this. . . . The great bulk of them would find it practically impossible to extend their business."

In the Cement Industry [1] two combines produce 75 per cent. of the total output of the country. The fourteen independent firms cannot either produce or sell as cheaply.

In the case of Sewing Cotton,[2] Coates & Co., with its satellite companies, produces from 60 to 90 per cent. of the sewing cotton used for domestic purposes, yet there are said to be sixty other manufacturers.

The Milk trade [3] illustrates the economies that can be effected by a large unit in a small unit industry. The United Dairies was formed in 1915 by the fusion of four large firms and "numerous smaller businesses." It claims to have consolidated 736 milk rounds, eliminating 592 horses, and to have closed sixty-three redundant depots and shops in the retail section. In the wholesale, economies have been made in the working of subsidiary firms; such as the continuous employment of plant in selected factories; centralised direction for railed milk and distribution from the nearest depots, dispensing with 200 horses.

On the other hand, writing of the "milk battle," *The Times* of April 8, 1922, says:

> "It has always been advanced in favour of the forming of combines that economy in cost of distribution would be effected. From the better wholesale prices given in their summer contracts by firms outside the combines, this contention has not held good in practice."

The relatively smaller firms are the more successful in two industries with strong combines.

At the time of the investigation, 75 per cent. of the newly-established English Dye Manufacturing industry [1] was in the hands of the great British Dyestuffs Corporation. There were

[1] Cmd. 1091. [2] Cmd. 563, 930 and 1173. [3] Cmd. 1102. [4] Cmd. 1370.

also twenty-five "fairly large" independent firms and a number of smaller ones. The report described the achievements of some of these firms:

> "The success which is attached to the operations of the smaller dye-making concerns leads us to think that the advantages of centralised and large-scale production may easily be exaggerated."

In the Dyeing, Finishing, Bleaching and Printing trade [1] it was found, in comparing the costing returns of eight non-combine firms and six combines, that—

> "The 'combines' advanced their prices or charges more than the 'non-combines,' that none the less their ratio of profit to turnover declined somewhat, while that of the 'non-combines' increased."

The following industries seem to be entirely carried on by large firms—Matches,[2] Uniform Cloth,[3] Light Castings,[4] Pipes and Castings,[5] Oils and Fats,[6] Salt, Explosives.[7]

The reports indicate the functions and relative importance of the brokers, wholesalers, retailers, etc., who exist in considerable numbers even in some of the most trustified industries,[8] thus considerably extending the number of persons who exercise managerial functions.

In Tobacco manufacturing [9] the Imperial Tobacco Company consists of eighteen manufacturers (as well as one firm of multiple retailers); it produces from 55 to 60 per cent. of the tobacco consumed in this country, and its annual net profits exceed £3,000,000. But there are 40,000 retailers dealing exclusively in tobacco, besides others who also sell newspapers, sweets, etc.

> "The Imperial Tobacco Company from the time of its formation appears to have realised the importance of the retailers and to have taken special steps to secure its position among them. To maintain and extend the sale of its goods the company has established a bonus scheme which in effect employs the individual retailer as the advertising agent of the company.
>
> . . . .
>
> "We are informed by some outside manufacturers that in order to maintain their connections and sales they have been compelled to imitate the Imperial Tobacco Company in respect of the bonus scheme and of the minimum retail prices."

[1] Cmd. 1371. [2] Cmd. 924. [3] Cmd. 1339. [4] Cmd. 1200.
[5] Cmd. 1217. [6] Cmd. 982. [7] Cmd. 1347.
[8] This may also be seen in some industries from the Census.
[9] Cmd. 558.

Another example of helpful relations between large and small units in different branches of an industry occurs in jam-making. Messrs. Crosse & Blackwell,

> "in certain instances . . . advanced money to new growers to enable them to plant fruit, the company having the option to purchase the fruit at a minimum market price."

Drugs and medicinal tablets [1] are manufactured by 310 firms. In addition to wholesalers, there are between 20,000 and 30,000 retail dealers. The Trade Association is controlled by an equal number of representatives of the manufacturers, wholesalers and retailers, and it covers all three branches. The Report of the Committee appointed to inquire into the principle of fixed Retail Prices [2] explains the community of interest in this trade:

> "At a time when open competition in proprietary articles was in vogue, it was found that there was very keen cutting of prices between retailers themselves, proprietary articles being sold at a margin of profit which left less than a living wage to the retailer. Many of the smaller men were driven out of business, and this reacts on the manufacturer, who found the number of retailers who were prepared to push the sale of, or even to stock, his product diminishing. In addition to this it was found that the large stores were in the habit of selling proprietary articles at a price less in some cases than the actual cost to the small retailer. This was done in order to attract purchasers for other goods and not by way of legitimate competition, it sometimes being found that the proprietors of large stores, after accomplishing their object, ceased to stock the article any further, with the result that the manufacturer of it was 'let down'; and the small retailer had lost that part of his business without any corresponding advantage to the public."

Distillers' Yeast,[3] which is mainly used in the raising of bread, is entirely produced in whisky distilleries which are owned by three companies. The yeast is handled by twenty-three wholesalers, known as "merchants," who distribute it either through other wholesalers or directly to "the very large number of retailers," who are scattered all over the country and supply the bakers and grocers locally. "Although the local Dealers' Associations are, we are told, independent of the Wholesale Merchant Association, they appear to be virtually under its control." The directorates of two of the distillery combines are strongly represented on those of the principal Wholesaler companies.

[1] Cmd. 633. [2] Cmd. 662. [3] Cmd. 1216.

Two companies manufacture all horse-nails produced in England.[1] The nails are distributed by wholesalers to the 12,000 to 14,000 working farriers. The reports mention agreements between the wholesalers and farriers only.

The respective functions of productive and distributive units vary in different trades. The Yorkshire Woollen and Worsted industries are differently organised:[2]

> "Whereas in the worsted industry the various processes are standardised and mostly carried out by separate and dissociated firms, the manufacturer in the woollen industry, in the majority of cases, buys his raw material and produces everything up to the finished cloth entirely under one roof. Consequently the risk, which in the worsted industry is spread over a number of firms at different stages and at different times, is concentrated in the case of woollen cloth upon the manufacturer alone, and in this case the manufacturer includes the woollen spinner."

On the other hand, other authorities show that "as a rule woollen mills are very much smaller than worsted mills."[3]

The Top-maker[4] in the worsted industry is, however, "essentially a merchant and not a manufacturer."

> "Top-making is one of the chain of processes in the conversion of wool into worsted cloth, and the term 'top' is applied to the wool when it has been prepared to the point at which it enters the spinning mill to be spun into yarn. Speaking generally it may be said that the business of top-making is to purchase wool in its raw state, to sort it into different qualities, and to blend these qualities for production of the desired top, to have it scoured and combed, and to sell the resultant tops either direct to the worsted spinner or to the merchant who disposes of them to the spinner in this country or exports them. The top-maker is not, as a rule, the owner of the machinery which carries out the combing process, *i. e.* the actual conversion of the sorted and blended wool into the top. He purchases the wool and arranges it to be combed on commission, for which service a fixed schedule of combing charges exists for the whole trade."

The report points out that the top-maker contributes "skill and judgment of a high order" and bears a considerable amount of financial risk.

[1] Iron and Steel Products, Cmd. 1268.

[2] Report on Yorkshire Tweed Cloths, Cmd. 858.

[3] *British Industries*, edited by Prof. Ashley, p. 90. Professor Chapman, in his article in the *Statistical Journal* of 1912 shows that the average factory in the woollen districts was a unit of 2,000 spindles. In the worsted district factories averaged 4,000 to 6,000 and 10,000 spindles.

[4] Cmd. 1192.

The useful functions fulfilled by brokers are noted in several industries. Hides [1] are usually bought on commission:

> "The advantage to a tanner in buying through an agent is that he gets only the actual hides he wants instead of having to take a whole 'lot.' Any one agent may have buying orders from several tanners."

In Oils and Fats [2] the West African Trade is a peculiar and intricate one, in that it is conducted through innumerable trading stations:

> "Importing merchants usually prefer to do their business through a broker, to whom they pay a certain percentage to arrange all their transactions."

In the London branch of the imported bacon industry [3] there is an agreement that wholesalers will only deal through agents and agents with wholesalers.[4]

> This understanding is "defended on the theory that the two classes of agents and wholesalers are necessary to the trade. Bacon is imported in the green stage, and has usually to be smoked before being sold to the customer. It is not economical to have a smoke-house unless it is kept constantly in operation, and only a very few large retailers are able to do so. The agents also have not got smoke-houses, and the whole work of processing devolves on the wholesalers. These wholesalers are generally provision merchants and can combine the sale of bacon with that of other goods, thus doing it more cheaply.
>
> . . . .
>
> "The wholesaler thus appears to be indispensable to the agent, but is the agent indispensable to the wholesaler? The answer would seem to be that any individual agent is not, but that the whole body of agents is. . . . Under the present system every day or other day he" (viz. the wholesaler) "is in immediate contact with every agent, so he knows exactly what goods are offering, and can form his own opinion as to the position of the market and act upon it at once. If he buys in Denmark he cannot hope to be in contact with more than a few of the producers, and he has no means of obtaining anything like a general view of the market."

Wholesalers are said to be an advantage to "the retailer who is too small to buy in large quantities from an agent," as the wholesaler is probably trying to sell a whole line of goods, and is therefore more likely to come to terms over individual items.

[1] Interim Report on Meat, Cmd. 1057. [2] Cmd. 982.
[3] Final Report on Meat, Cmd. 1356.
[4] With the exception of a few very large retailing firms.

> In Agricultural Machinery[1] "the dealers form the connecting link between the manufacturer and the purchaser. The bulk of the makers sell through the medium of dealers, whose commissions are arranged on a uniform scale. . . . The dealers act as repairers of machines, and they also let out implements for hire. They advise farmers as to suitable types, taking into consideration the nature of the land on which any particular machine is to be worked, and they also act as advertisers for the firm manufacturing the implements."

Some Salt manufacturers[2] began to supply London customers direct, "contrary to the interests of the merchants, and the recognised customs of the trade," but an agreement is now in force by which the salt manufacturers agree, subject to certain conditions, only to deal with the London Association of Primary Wholesale Merchants within that area.

An instance of the power of the merchants is given in the second report on the Standard Boot and Shoe Scheme.[3] The manufacturers were friendly to the scheme, and its failure was attributed to the attitude of the retailers.

In several trades connected with the Building industry manufacturers give preferential rates to merchants as against the direct consumer.

In the case of Clayware Pipes,[4] merchants on the Manufacturing Associations' list are granted a rebate of $7\frac{1}{2}$ per cent. on small pipes and 5 per cent. on big ones, independently of special terms made for members of the Builders' Merchants' Association.

> "It has been represented to us by one of the principal manufacturers in the trade . . . that the merchants were useful in that they were looked upon as distributors, saved travellers' commissions and costs, and were accustomed to purchase stocks of what are known in the trade as 'specials.'"

Very similar advantages are given to merchants in the case of Glazed and Floor Tiles[5] and of Cement.[6]

> Cement manufacturers "submitted to us that to make any allowance to the large buyer purchasing direct, would be to operate unfairly against the builder's merchant, inasmuch as the buyers would be induced to deal with the producer whenever it paid them to do so, and the merchant would, in consequence, be deprived of a considerable proportion of his trade. It must not be overlooked, however, that manufacturers supplying direct and thus eliminating the merchants, do not secure the whole of the merchant's allowance as an additional profit, in that they have to pay in such cases the costs of distribution."

[1] Cmd. 1315. [2] Cmd. 832. [3] Cmd. 1269.
[4] Cmd. 1209. [5] Cmd. 1209. [6] Cmd. 1091.

In the Building Sand Trade[1] producers charge 6*d.* per ton more to consumers than to merchants exclusive of transport charges. "The producers, lacking distributive facilities, maintain that the merchant is essential for their trade."

The National Light Castings Association[2] has a reciprocal agreement with the Builders' Merchants' Alliance (wholesalers) and the Ironmongers' Federated Association (retailers). A price-list has been drawn up and a graduated scale of rebates is given to merchants observing it, with a super-rebate to those purchasing very large amounts. The general public is charged 10 per cent. above this price-list on most lines of goods.

Sometimes, however, manufacturers tend to favour the large merchant at the expense of the small one. Mr. Hilton, in his addendum to the report of the Committee appointed to inquire into the principle of Fixed Retail Prices,[3] says :—

> "The differential discounts at present given by some firms and associations represent far more than the saving in expense to the manufacturer in selling in large instead of small parcels, and works out in practice as a subsidy given to the large shop or store at the expense of the small shop."

The number of merchants, etc., who handle goods in their transit to the consumer varies from trade to trade.

Dyers and Cleaners[4] seem to be exceptional in dealing directly with the customer through their own depots.

> "Practically every firm of any size in the trade maintains a certain number of branches for receiving goods to be dyed and cleaned, and for distributing them when finished. It was stated in evidence that the cost of operating these branches amounted to from 33 to 48 per cent. of the total cost charged on an article. In order, however, to meet the convenience of the public such a provision is essential, so that in each locality a customer desirous of having an article cleaned or dyed may receive expert attention and advice, as well as having the article collected and delivered."

In addition some firms have agencies undertaken by shopkeepers.

In the Laundry industry[5] multiple launderers also tend to have their own depots and agencies.

In Agricultural Machinery[6] and Moulded Glass,[7] and also in the case of the Imperial Tobacco Company,[8] there are no intermediate wholesalers between the manufacturer and retailer. The product passes through three hands in the case of Meat,[9] Drugs,[10] Horsenails and Farriery,[11] and Brewed Vinegar.[12] There

[1] Cmd. 1091. [2] Cmd. 1200. [3] Cmd. 662. [4] Cmd. 1361.
[5] Cmd. 903. [6] Cmd. 1315. [7] Cmd. 1385. [8] Cmd. 558.
[9] Cmd. 1057. [10] Cmd. 633. [11] Cmd. 540, Cmd. 1268. [12] Cmd. 1355.

are sometimes both secondary and primary wholesalers in Salt [1] and Yeast.[2] In a good many industries the methods of distribution vary. Slates [3] are sometimes bought at the quarries by a merchant who resells them, but sometimes by a roofing contractor who "contracts both to sell the slates and to fix them on a building." Large builders buy bricks [4] direct from the kilns, but builders' merchants supply "local customers with small quantities." Clayware Pipes [5] are usually sold to the builders, but occasionally through a merchant.

Milk [6] is distributed either directly by the producer, through a retailer, a wholesaler and a retailer, or through a factory, wholesaler and retailer.

In the Fish trade [7] trawl-owners are occasionally wholesalers, or even retailers, but 88 per cent. of the fish is sold by professional salesmen as soon as it is landed, and is bought by wholesalers, who dispose of it either to secondary wholesalers in inland markets, to retailers who order it direct, or in basses to private customers.

The majority of the trades investigated, including such small unit trades as Clog-making [8] and Farriery,[9] were found to be organised. In the handling of quinine,[10] salt,[11] tiles,[12] cement,[13] and soap,[14] the larger firms belong to the associations, and in the two latter, as well as in Glass Bottle Making,[15] the combines in the industries dominate the trade associations. The Vinegar [16] trade association was specially formed to protect the interests of the vinegar brewers from the competition of the makers of unbrewed vinegar. But the largest firms among the builders' merchants,[17] and some of those among the Agricultural Machine Makers,[18] do not belong to their respective organisations.

The repairing of boots, shoes and footwear [19] affords the most striking instance of what may be accomplished for the small employer by trade organisation.

> "For a long period prior to the War the majority of the persons engaged in the repair of footwear were badly paid and also worked long hours. The financial condition of the small employer differed but slightly from that of his workman. A low standard of living prevailed throughout the trade, and no associations existed for mutual interests among employers till about fifteen years ago. Employers generally worked long hours themselves and demanded the same conditions from those

[1] Cmd. 832. [2] Cmd. 1216. [3] Cmd. 1338. [4] Cmd. 959.
[5] Cmd. 1209. [6] Cmd. 1102. [7] Cmd. 514. [8] Cmd. 541.
[9] Cmd. 540. [10] Cmd. 449. [11] Cmd. 832. [12] Cmd. 1209.
[13] Cmd. 1091. [14] Cmd. 1126. [15] Cmd. 1066. [16] Cmd. 1355.
[17] Cmd. 1200 (noted in description of agreement with N.S.C.A.).
[18] Cmd. 1315. [19] Cmd. 1345.

they employed. Methods of costing material and calculating overhead expenses were generally unknown or ignored.

. . . .

"Employers' Associations, though started earlier, really took effective shape about seven years ago. They began to introduce technical knowledge among their members, including modern methods of leather-cutting, book-keeping, costings, etc. They also began to arrange schedules of prices of repairs for each locality which gradually became operative. . . . With the rise of the associations conditions began to improve, and the fixing of minimum district schedule prices has introduced a new era compared with a few years ago. Generally speaking, members of the trade are now in a better position with regard to the purchasing of leather and grindery."

In the final summary of their findings the Committee reports:

"That the Boot and Shoe repairing trade has raised itself from one of the worst-paid industries in the United Kingdom to a level with some of the other trades as regards profit to employers, and general conditions of employment."

The Bedstead Makers' Federation [1] is a price fixing, output regulating organisation, but, in addition—

"One of the objects of the Federation, we learn, has been to show less highly organised manufacturers where their costs can be reduced. With this end in view the Federation arranged for a schedule to be prepared of the average costs of some of the large factories, which can produce economically, and this is circulated among all the federated manufacturers in order that the smaller or less efficient manufacturer may check his costs item by item. The minimum selling prices authorised by the Federation for all its component firms are reckoned on these standard costs.

. . . .

"We are informed that the Federation has made considerable progress in standardising the types of bedsteads produced. Some years ago each firm in the Federation made its own tools and dies, but the Federation has now organised a central workshop for the manufacture of the implements. Up-to-date machinery has been installed, every tool, die and gauge produced is of the same size and pattern. Economy, we are informed, has been thus effected and the work of standardisation of the finished bedsteads has been in a great measure achieved. Arrangements are also in progress for unifying, as far as possible, the purchase of raw materials so as to eliminate unnecessary competition between members of the Federation. This point is of importance in view of the fact that bedstead manufacture is, in the main, an assembling trade, and that, therefore, raw materials form by far the most important element in cost."

[1] Cmd. 607.

The National Federation of Dyers and Cleaners [1] drew up its price-list, " owing to the difficulties, particularly with small firms, of establishing anything in the way of an accurate costing system."

The small Yorkshire Soap-making firms [2] organised successfully during the War, in order to represent their interests with Government departments.

Organisations that restrict output, such as those in Cut Steel Nails,[3] Bedstead-making,[4] and Light Castings,[5] tend to keep weaker firms in existence and prevent the expansion of stronger ones at their expense.

On the other hand, both in Yeast distribution [6] and in Farriery [7] the organisations prevent new men starting businesses.

> " It was made clear to us that it was practically impossible for any person or firm other than a loyal member of the wholesale Yeast Merchants' Association or one of the Yeast Dealers' Associations to obtain supplies of British-made yeast except by acquiring the business of an established dealer. This would also apply to an employee of a yeast dealer who might wish to commence business on his own account."

In the case of Farriery it has been proved "that individual men who desire to enter the trade have been hindered if not prevented from doing so by an attempt to boycott them as regards supplies of iron and horse nails." Owing to weakness of organisation, the Associations of the Merchants and the Farriers have not been able to make this boycott effective over the whole country.

In Hides and Fats [8] an illustration of co-operation between small units is given.

> " Butchers, as a general rule, send their hides to 'hide markets,' *i. e.* to firms which collect the hides, sort and class them, and sell them on commission by auction. In a great many cases these firms are companies whose shareholders are the local butchers."

Two circumstances prejudicial to the smaller units are mentioned several times. The extra expense involved in buying in small quantities is noted in reports dealing with building materials, viz. in Bricks,[9] Light Castings [10] and Cement.[11] Dyestuffs and chemicals for cleaning [12] are also said to be cheaper when bought in large quantities. In general the small retailers [13] are in danger

[1] Cmd. 1361. [2] Cmd. 1126. [3] Cmd. 1268. [4] Cmd. 607.
[5] Cmd. 1200. [6] Cmd. 1216. [7] Cmd. 540.
[8] See Interim Report on Meat, Cmd. 1057. [9] Cmd. 959.
[10] Cmd. 1200. [11] Cmd. 1091. [12] Cmd. 1361. [13] Cmd. 662.

" of being devoured by their more powerful competitors, who, by dealing in a large range of goods, are able successfully to swallow those who rely for their living upon a single range of articles."

The other factor, specially harmful to smaller and weaker firms, is that of foreign competition. Its effect on the Brush trade has already been noted. The Glass trade has also suffered severely:

> " The history of the plate and sheet window glass trade is similar to that of domestic glassware, except that the effect of competition from abroad has been even more serious. Manufacturers of these commodities have been gradually forced out of business during the past half-century owing to foreign competition, with the exception of Messrs. Pilkington Bros., Ltd., of St. Helens, who by their strength and efficiency were able to hold their position in the trade. . . . This firm is now the only firm manufacturing plate glass in this country, and also one of the two engaged in the manufacture of sheet window glass." [1]

In Matches, almost all of the eighteen surviving firms belong to three groups, and a list is given of sixteen independent firms, who were obliged to shut down owing to foreign competition.[2] Foreign competition is also given as the reason for the formation of the first Cement combine,[3] which absorbed 75 per cent. of the " total productive capacity of the country."

It is rather remarkable that these reports, dealing as they do with articles in very wide and common use, should contain so much information regarding the small firm, for such manufactures offer the least promising field for small unit production.

> " Wherever the material worked is not uniform in quality, or cannot be graded or treated in bulk, then the large-scale method of specialised processes and large output will not apply. . . . An article or process cannot be standardised unless there is a large trade. Now there are many articles and services for which the demand is not large, steady or uniform. There are many processes of manufacture which cannot be standardised. Here is the field for the small firm."—H. Clay, *Economics for the General Reader*, p. 34.

I. F. Grant

[1] Cmd. 1385. [2] Cmd. 924. [3] Cmd. 1091.

[*Note by Editor.*—For a quantitative estimate of the survival of small units in London the reader may be referred to an article by Prof. Bowley on "The Survival of Small Firms," *Economica*, May 1921].

PROFESSOR CASSEL ON MONEY AND FOREIGN EXCHANGE

Money and Foreign Exchange after 1914. By GUSTAV CASSEL. (London: Constable & Co., 1922. Pp. viii + 287.)

PROFESSOR CASSEL tramples down in fine style many of the absurd doctrines with which the European public was bamboozled during the war and for some time afterwards. The few who lifted up their voices in the wilderness will enjoy the contempt with which he examines and dismisses the arguments of the official apologists who denied that their currencies had depreciated, or alleged that the cause of their depreciation was not the manufacture of additional currency, but the "balance of trade," which could be put right in the best mercantilist manner by suitable encouragements of export and discouragements of import. The only doubt that suggests itself in this province is whether his exposition will really clear up the difficulty which many minds seem to find in seeing exactly why and how the issue of additional currency raises prices. To call the addition "artificial" or "false purchasing power" seems likely to confuse the reader. In a self-contained community which used no money but ounces of gold, additions to the currency owing to output from the mines could not reasonably be described as "artificial or false" purchasing power which would "inevitably compete with the genuine" (p. 19). Surely it is both simpler and truer to say merely that the additional money, whether it is metal or paper, competes with the already existing money in the purchase of commodities and services, and therefore raises the prices of commodities and services. On p. 20, Prof. Cassel speaks in a way which suggests that the issuer of additional currency is able to purchase commodities and services because prices rise and other buyers consequently cannot buy as much as before. It is "part of the object of inflation to force up the prices of commodities." Is not this putting the matter very perversely? The issuer is able to get commodities and services because he has money to give for them: the rise of prices which his purchases cause goes against him, and makes his new money buy less than an equal amount of money would have done before he came on

the market. He does not want a rise of prices at all, and to say that "part of the object" of his issue is a rise of prices is extremely likely to mislead.

It will perhaps be said that there cannot be more than a difference about a method of expression in this matter—that everyone, or at any rate every Professor of Economics, must really know why and how additions to currency raise prices, however he may fail in explaining it in lectures or books. This seems likely, but I cannot help thinking that a slight haziness about the fundamentals of the question has a good deal to do with the adoption by Prof. Cassel of what is the main gospel of his book, the doctrine that prices must be regulated by a proper "discount policy." Prices existed and were sometimes nearly stable for considerable periods, and sometimes fluctuated rather wildly long before there were any banks to declare bank rates, and obviously changes of price level would take place even in a community where no one ever borrowed or lent. When we were on a gold standard we thought of the value of gold falling and prices of commodities rising because men in Australia, Alaska or the Transvaal were producing gold in large quantities and giving it in exchange—"selling" it if you like—for goods and services. We never thought of alleging that it was all the fault of the "central banks," and reproaching them with not keeping bank rates high enough to keep prices down. We knew that prices were being raised by the new gold, and we never dreamt of the output of gold being regulated by a "discount policy." Banks, just like private persons, could, we knew, counteract the effect of the output on the market by storing additional quantities in their cellars, provided that they did not nullify the counteraction by issuing additional paper currency. But to acquire gold and keep it out of use is just as expensive to a bank as it is to an individual, and we never expected the banks to do it because of their love for the world at large. (The United States government has in its time bought both silver and gold in order to keep up their value, but this was done from love of the silver and gold producers in the United States.) And if such a thing had been proposed we should have said that the banks, even if willing, could do very little in that way.

Similarly, if we were troubled by a fall of prices attributed to the output of gold not keeping pace with the requirements of gold for currency and other purposes, we thought of schemes for "economising" gold, that is, for throwing it out of certain uses by the provision of substitutes or the adoption of methods which

would cause it to be less required. So far as I remember, low bank rates were never recommended for this purpose: [illegible] generally had them!

Is the situation fundamentally different to-day? So far as gold money is concerned, evidently not. According to Prof. Cassel's view, the American banking organisation has recently by a wrong "discount policy" kept the value of gold higher than it should have been, and thereby done a great deal of damage to the United States and other countries on a gold standard or trying to get up to it, but he does not seem to suppose that the wrong policy can continue very long, and in talking of the future when stability of currency will be restored throughout the world, he seems to be thinking much as we used to think about the value of gold, deprecating its use in circulation, the acquisition of large stores, called "reserves," of gold and so on, because he fears a rise of the price level.

Applied to an inconvertible paper currency *issued by an uncontrolled bank*, the discount policy gospel has a little more plausibility. We think of such a bank as issuing this currency by way of loans to borrowers, and consequently issuing more when it charges a low rate for the accommodation than when it charges a high rate. We see that it cannot be stopped from lending by want of means or fear of bankruptcy, since the power of its printing press to print notes of larger denominations is infinite. (If the noughts are too many to print in a line, the figure can be squared, cubed or raised still higher.) The belief that the bank can only issue the notes by way of loans is incorrect: it can build itself new premises, buy lands and securities. But if we suppose these outlets somehow stopped up, as they might perhaps be if we take the high discount policy to include abstention from expenditure which did not promise a return equal to the rate of discount, it certainly looks legitimate to say that the value of the currency, or (which is the same thing) the level of prices, can be regulated by the discount policy of the bank. But clearly this is only because, under the conditions assumed, the discount policy will regulate the issues and withdrawals of currency: the gospel of discount policy is only a somewhat corrupted version of the good old gospel of due limitation of issue successfully preached by Ricardo and Horner in 1809-19.

Even the corrupted version may perhaps be good enough to put and keep the currencies of Sweden, Holland and a few other countries on the required level. The management of the Swedish Riksbank and Dr. Vissering may possibly find salvation

by being converted to it, imperfect as it is. But applied to the greater part of Europe it is, on Prof. Cassel's own admission, absolutely useless. For the success of the policy, he says, it "must, of course, be assumed that the State, by its demands for credit, does not force a creation of bank currency nor itself create fresh paper money to cover its own expenditure" (p. 106). This is exactly what can *not* be assumed in all the most troublesome cases of diseased currency systems at the present time. In most of the suffering countries the State is always going to the bank of issue and asking for another loan, and at the moment the bank has nothing to lend. The President of the Bank might well reply to the Finance Minister, "I am afraid we shall have to print another twenty milliards, and prices are rising already, so that according to Cassel's theory, we must charge you a very high rate: what do you say to 20 per cent.?" "All right," answers the Finance Minister quite cheerfully, "it's all the same to me: by that little arrangement we made the other day all your profits are coming back to the Treasury, so you can charge what you like!" Sometimes the State prints the paper itself and either spends it direct without any disguise, as in Russia, or, as in Great Britain, first goes through the form of "lending" it to itself in Ways and Means Advances or on Treasury Bills and other "Government securities." It is tolerably obvious that no policy of the banks can prevent a Government from itself issuing directly as much inconvertible legal tender money as it chooses: nor is it any use to tell a Government which goes through the hollow form of lending an issue to itself that it ought to charge itself a high rate of interest. In all this immense and important sphere, then, Prof. Cassel himself is bound to preach that Governments should meet their expenses by other means than creating new currency, and this is simply the old gospel of due limitation of issue.

But, in scriptural phrase, he "kicks against the pricks." He cannot see much virtue in any limitation except in his own at best insufficient and at worst wholly futile limitation by discount. When notes are convertible into free (*i. e.* meltable and exportable) gold, they are limited in amount by this convertibility—limited to the amount which can be got into circulation and kept there without driving their value below par with gold. "The liability to redeem notes," Prof. Cassel admits, "compels the central bank to adopt a right discount policy, and that has its importance for the maintenance of the monetary unit. But it is not a means to that end." I should say that is

exactly what it is, and, moreover, that it is a means which does not act, as he supposes, indirectly through the discount rate but directly through the limitation of issue caused by the bank not being able to keep the notes outstanding if the gold which it is obliged to give for them is greater in value than they are. The right discount policy of the bank is forced upon it by what the Bank of England directors used to call "consideration for the safety of their establishment," a thing which it would not have to worry about if it had, and expected always to retain, the power of issuing unlimited paper currency legal tender. Nothing can bankrupt a bank or Government which possesses this power and takes care to owe nothing except money of the country: even the dropping of the value of the currency to zero will not make it unable to pay, since all its obligations can then be paid in waste paper.

If by an unfortunate lapse from sound policy a paper currency has been allowed to lose its convertibility into free gold and fallen below its par with gold and it is decided to bring it up again to that or some other level, the old gospel taught that the institution which had control of the issue, whether bank or Government, should be directed to reduce the amount outstanding (or in a mild case merely to keep it down) till the value of the paper rose to the required level. The Cunliffe Committee accepted that doctrine, and recommended a policy of cautious reduction (First Report, p. 12, top). The Treasury accepted the particular limitation proposed by the Committee at the end of 1919, but owing to the usual seasonal decline at the beginning of the calendar year, this had no operation till a few months later, when it broke the "vicious circle" which people used to talk about, or "pricked the bubble," as their ancestors would have said, with effects terrific to those who believed in a ten-year boom. A right "discount policy" was forced on the banking organisation when it could no longer depend on the continuance of the stream of Currency Notes hot from the press. The post-war slump, which everyone with any knowledge of history had always expected, at last set in. Prof. Cassel is not at all pleased. He belittles the repression and reduction of the notes outstanding, and also the reduction of prices caused by the Committee, saying that "after the Committee issued its first report" the amount of notes outstanding still increased, and the Economist "price index rose from 227 in November 1918 to a maximum of 310 in March 1920." Is it fair to depreciate the recommendation of a committee because that recommendation did not have the

desired effect during twelve months before it was adopted by the Government and a few months more before it came into actual operation?

But in this matter Prof. Cassel tries to ride at one and the same time two horses galloping in contrary directions. While suggesting that the Committee's measure was not very effective, he complains strongly of its effectiveness. Before recommending it, he says, the Committee ought to have thought of the frightful slump it would cause. He has no ground for supposing that they did not. It is true that they painted no picture of the horrors of slump and depression in their reports, but does the fact that a physician has prescribed for a patient without descanting to him on the extreme disagreeableness of the prescription, prove that he was not fully aware of that disagreeableness?

This brings us to the second great article of Prof. Cassel's creed, the doctrine that deflation must always be avoided at all costs. When he sees inflation he cries "Halt! but mind you do not recoil a single inch!" On grounds of justice, as justice is actually conceived by civilised man, this is clearly wrong. The depreciation of money may have been so recent and so violent that less injustice on the whole is done by going back part of the way or even the whole way to the old standard than by adhering exactly to what the newspapers insist on calling "the new low record" of the day. Economic expediency generally agrees with received ideas of justice, and certainly does so here. What precise figure it would be best to select for the stabilisation of the German mark here and now on this 1st of November, 1922, it is difficult to say, but all reasonable persons would agree that the figure would be appreciably higher than that of to-day's purchasing power.

Prof. Cassel's plan is to accept the price level of the moment and regulate the currency so as to maintain it without change, and so avoid slump and depression. Whether it is completely possible to do this he seems to have some little doubt, but he certainly over-rates the extent to which it is possible to approximate to it. Where prices have been rising for some considerable time, business is all carried on under the assumption that the rise will continue: when this assumption is shown to be wrong, and it has to be accepted that prices will rise no further, business arrangements will be upset in exactly the same way as they are upset by a change from a condition of expected stable prices to a condition of expected falling prices, and with exactly the same result of causing a slump and depression. Anyone with diagrammatical

tastes may illustrate the angle in the line of prices for himself, and he will see at once what a jolt can be hidden under the blessed word "stabilisation." On the whole a change from a rising line or curve to the horizontal is likely to be more violent, and therefore more disturbing, than a change from the horizontal to a falling line or curve. It may perhaps be suggested that the proper plan is to round off the transition in the way in which the top of a road hill is always rounded off. If the mark is one-thousandth of its old value to-day, announce that the issue of paper marks shall be so regulated that it shall be one-eleven-hundredth six months hence, one-twelve-hundredth say a year hence, and then remain stationary. This, however, is probably quite impracticable, and if it were not, it could only have the effect of moderating the slump while it lengthened the depression.

Depression is the penalty of boom, whether the boom has a monetary or some other origin, and it is scarcely in the nature of things that any means of avoiding it can be discovered. To use unnecessarily strong language about it and harp on its "disastrous" and "appalling" nature is scarcely the way to help us to bear it and emerge from it, or to encourage the countries which are still inflating to face it and get it over. Let us talk rather of the brighter side of the picture. Though Prof. Cassel suggests that deflation adds immensely to the difficulty of State finance (p. 206), we have seen the position of our own state finance improve enormously since the deflation began, while that of the inflating countries gets worse and worse. Though we have many unemployed, we have the satisfaction of knowing that the employed in this and other deflated countries are better off than the employed where the inflation boom is still in full swing, and that what they produce is sufficient not only for that but at the same time to provide for the unemployed and incapable, better at any rate than they have ever been provided for at any earlier period—so well, in fact, that the goodness of the provision is supposed to obstruct to an appreciable extent their return to work by preventing necessary reductions of money wages in certain directions. And finally, let us remember what figures will never show, but nearly everyone feels, that the people of the deflated countries are, in fact, more happy and contented, less inclined to internal struggle and bloodshed, than they were in the wild orgy of 1919-20. With these things in our mind we shall be better able to advise our less fortunate neighbours to set aside their fears and face the inevitable inconvenience of stopping the rise of prices.

The question of the moment is not whether these inconveniences might have been slightly less than they have been in the United States, Canada, England, or Sweden, but what is to be done in countries where the unit of account is still depreciating at a terrific and increasing rate. In the worst cases Prof. Cassel suggests very reasonably the abandonment of "the old currency" (by which he means the post 1914 paper currency). He would lay "entirely new foundations." But would it not be simpler and easier to use the pre-war foundations? What ails, for instance, the old gold mark? It is just as easy to turn the present paper mark into, say, one-thousandth of a gold mark as it would be to make it one-five-hundredth of a gold unit twice the weight of a gold mark.

But whether the pre-war unit or some other is adopted, it seems unlikely that all obligations to pay marks will be dischargeable at the same rate as that at which the paper notes are taken in. It is more probable that the numerous historical precedents will be followed and a temporal scale set up, beginning at par for pre-war contracts and descending with the recorded depreciation. A plan very difficult, no doubt, to apply and of very imperfect efficacy for its purpose, but perhaps not so impossible in practice as Prof. Cassel's rather lofty dismissal of "old claims" as now rendered "practically valueless" by the depreciation of currency, and therefore "disposed of" (p. 268). For my part I find it difficult to conceive that in any moderately civilised country not only the National Debt, but also the debts of local authorities, the debentures and preference stocks of all companies, life assurances, annuities and pensions, rents from long leases, and other obligations expressed in fixed sums of money, can be so easily "disposed of," that is to say, permanently cut down to perhaps a thousandth or a ten-thousandth of their proper value merely because a crazy Government printed a great many inconvertible notes, most of them in 1921-2.

EDWIN CANNAN

REVIEWS

Das Malthus'sche Bevölkerungsgesetz und die theoretische Nationalökonomie der letzten Jahrzehnte. Von DR. SIEGFRIED BUDGE (Frankfurt). Braun: Karlsruhe. 1912. Pp. 221.

The Population Problem, a study in Human Evolution. By A. M. CARR-SAUNDERS. Oxford: Clarendon Press. 1922. Pp. 482. 21*s*. net.

THESE two strong books are in complete contrast, but not in conflict, and they might well be taken as complementary of each other. Mr. Carr-Saunders surveys a vaster field than Dr. Budge, no less a field than the evolution of man from the beginning of life on this planet. The German author limits himself to one book and its critics: but he gives us an independent economic discussion, which, some of us feel, was bound to come in the end, if not sooner.

Taking the "Malthusian law" to be roughly this: that population tends to increase beyond the means of subsistence, he considers whether, in face of many objections presented by economic writers in the last two or three decades, the said "law" still holds its own. He decides in its favour; and it is no hasty judgment. He has the rare qualification of a thorough knowledge of his author, and is thus able to show that most of the objections were forestalled in the second and later editions of the *Essay on Population*. Many critics, for example, seem unaware of the importance attached by Malthus himself to the notion of the "standard of living," the meaning of "necessaries" to the people concerned (Budge, 27 *seq.*). Dr. Budge is the first for a long time to do him full justice in this vital particular. Some of the critics make his "tendency" into a prophecy of the remote future, when, in the last days, there is to be an appalling replenishment of the earth.[1] It was meant for a statement of present facts. Some think that Malthus stands or falls with the exactitude of the relation between a geometrical ratio of human increase and an arithmetical of food; some even think he had no knowledge of the principle of "decreasing

[1] The possibilities of fecundity are given by Mr. Carr-Saunders, p. 105, without any thought of a prophecy.

returns" in agriculture. He really takes the geometrical increase as a minimum for an unhindered growth of population, and goes on: "The rate according to which the productions of the earth may be supposed to increase it will not be so easy to determine. Of this, however, we may be perfectly certain, that the ratio of their increase must be totally of a different nature from the ratio of the increase of population. A thousand millions are just as easily doubled every twenty-five years by the power of population as a thousand. But the food to support the increase from the greater number will by no means be obtained with the same facility. Man is necessarily confined in room. When acre has been added to acre till all the fertile land is occupied, the yearly increase of food must depend on the amelioration of the land already in possession. This is a stream which from the nature of all soils, instead of increasing, must be gradually diminished. But population, could it be supplied with food, would go on with unexhausted vigour" (*Essay*, 2nd ed., 1803, I, i. 5). In fact Malthus makes the principle of decreasing returns the very basis of his conclusions (cf. Budge, p. 17, more fully ch. ii. 49 *seq.*).

His problem was therefore a present one. So far as he forecasts the future, he anticipates not an overcrowded, growing population, but a stationary one (Budge, p. 156 note, *Essay*, 6th ed., Bk. III, ch. xiii.), though, unlike Mill, he took no pleasure in the prospect. It is true that the modern restriction of births was neither anticipated nor desired by him. Still, the motive of it is just the retention of the standard of living in which he saw the chief hope of the future.

Dr. Budge will not allow us to present the last question so barely; in an interesting section (the second of ch. iii. 156 foll.) he argues that the phenomenon cannot be traced to prosperity or to economic hindrances or the fear of them. The great cause of the change observable since 1870 [1] is one lying outside economics and psychology, and, as it were, thrust upon us, namely, the exploits of science in lengthening life and lessening the death-rate. If more children survive and at the same time the standard of comfort is not to suffer, then there must be fewer children (184, 185). Malthus (says Dr. Budge) had a glimpse of this situation when he remarked (*Essay*, 6th ed., 1825, II, vii. 395) that the rate of increase in France, 1813 to

[1] In France forty years before, and therefore hardly explainable in this way. Budge, 177–180.—For our author's view of economic hindrances in Germany at present see ECONOMIC JOURNAL, June, 1917, p. 311.

1820, was kept up (in spite of a diminution of births) "owing to a diminished mortality, occasioned by the improved situation of the labouring classes since the Revolution, and aided probably by the introduction of vaccination." He says elsewhere "it will generally be found true that the increasing healthiness of a country will not only diminish the proportions of deaths, but the proportions of births and marriages" (*ib.* ch. ix. 449).

Nowadays we must say the proportions of births, not necessarily of marriages. Diminution of births is not now brought about simply by the Malthusian deferment of marriage. Dr. Budge allows that the figures point to a kind of prudential restraint that would not, to Malthus, have been a moral restraint. Since Malthus thought the risks of the deferment of marriage a less terrible evil than high mortality (Append. 4th ed., 1807, vol. II, 463, Budge, 197), he might conceivably, were he living now, have taken a milder view than in his own day, when he bluntly ranked all artificial restraints under vice (Append. 5th ed., 1817, p. 393). Whatever the ethics of the position, it is the desire of maintaining or raising the standard of living which is, at present, the broad general motive for the restriction of births. In Australia the motive is to raise the standard higher and higher and to keep labour well rewarded, under conditions of competition and private property. Socialism might lessen the felt need for restriction only too well (Budge, 218). Writing in 1912, Dr. Budge sees a political danger in the situation. He thinks it is the tragedy of the problem of population that, if population grows up to the full resources, the masses are poor; if it stops very far short of them, there is a standing temptation given to a more crowded race to strike in, overrun, and subdue (217, 220). He is less sanguine than either Malthus or his admirer John Stuart Mill.

Mr. Carr-Saunders is not among the admirers, though he makes full acknowledgment of the great influence of the *Essay* (ch. ix. 197 *seq.*). He thinks that Malthus confined himself too much to the problem of the relative increase of population and food, neglecting the productiveness of industry. He even says this last is "an idea which finds no place" in the *Essay* (198). Readers of the later chapters of its Third Book (viii. to xiv.) will hardly believe the charge. It is true that Malthus does not lay the emphasis where Mr. Saunders would place it. Mr. Saunders would look at the whole matter from the point of view of Professor Cannan's *optimum*, the number of people which, under given conditions of time, place, and habits, would

be just enough to secure the *maximum* production. When lation is below that number, increase is desirable; when over it, we have over-population (200, 201, cf. 213). We come back to Malthus, however, when we are told that this notion of the *optimum* involves the notion of a standard of living (224), and indeed we find our author dealing with this part of the subject quite in the manner of Malthus. On his own peculiar ground he renders valuable service to the Malthusian theory. As a review of the "positive" checks and how they work out a decrease of numbers, over the whole range of human life on this planet, historical and prehistorical, there is probably no book of its kind so comprehensive. The early part has a worthy sequel in the impressive chapters, xix. to xxi., written after the manner of Bagehot's *Physics and Politics*. If there is more Anthropology here than Economics,[1] at least the economist will be glad to have it. The problem of population is discussed, not as it is for man merely, but for the remote ancestors of man and "species in a state of nature" (37). The different forms of reproduction are considered (39 *seq.*) and the effect of the appearance of mind and intelligence in the higher animals (51). Unlike Weismann and Schallmayer, our author, dealing with differences of quality between species, admits the possibility of a "mutation" or permanent change in the germinal constitution as distinguished from mere "modification" (68). In man this germinal change has been influenced both in direction and intensity by mental evolution, and especially by tradition and communication of ideas (81, 82), in addition to environment. "Tradition comes to be of more importance than germinal change among the underlying causes of history. But tradition is profoundly influenced by the quantity of population, among other factors; and therefore, to the extent to which this is so, the determining factor in human history is still bound up with the population problem" (322). The conclusions are summed up in the last chapter (xxii. 475 *seq.*). In the earliest periods, ascertainable human achievement depends on germinal change; but, from the latest prehistoric times and throughout the historical, the controlling cause is the influence of environment on tradition; finally, in our own times progress is to be explained not by a change in quality, but by a growth in quantity of the population, breaking down the segmentary grouping of society (or grouping by descent, 430, 431) and giving rise to the organic

[1] As in Schallmayer's *Inheritance and Selection*, which was reviewed in this Journal, 1905, pp. 239–245.

grouping (by occupation and profession). " This is the paradox of the population problem. Change among species in a state of nature is based on germinal change alone; change among our prehuman ancestors was equally a matter of change in the quality of population; but the explanation of the most outstanding fact in recent history, broadly viewed, is to be sought in a change in quantity rather than in quality of population" (481).

If Mr. Carr-Saunders' paradox is less imposing than Dr. Budge's tragedy, it is because the facts of the latter lie at our feet and we tread on them daily with our clouted shoon.

J. BONAR

(1) *Premières Notions d'Économie Politique.* By CHARLES GIDE. (Paris: Albin Michel. Pp. 185.)

(2) *Précis d'Économie Politique.* By MAURICE JOURNÉ. (Paris: Librairie Félix Alcan. Pp. 490.)

(3) *A Text-book of Economics.* By M. BRIGGS, M.A. Camb., B.Sc. (Econ.) Lond. (London: University Tutorial Press, 1921. Pp. xvi + 527. Price 8s. 6d.)

(4) *Industrial and Commercial Geography.* By ARTHUR RADFORD, B.Sc. (Econ.). (London: Collins' Clear Type Press. 1922. Pp. 295.)

(5) *Principles of Political Science.* By R. N. GILCHRIST, M.A., Principal and Professor of Political Economy and Political Philosophy, Krishnagar College, Bengal. (Bengal, London, etc.: Longmans, Green & Co. 1921. Pp. 799 + li. Price 18s.)

(6) *Physical Economics: An Essay on Fundamental Principles.* By L. SOUTHERNS, M.A., B.Sc., Wh. Sch. (London: The Labour Publishing Company. 1921. Pp. 67. Price 2s. 6d.)

SOME knowledge of economic theory and machinery is a necessary equipment of the modern citizen, who is a very variable being; and the subject needs constant fresh presentment to meet the needs of students approaching it from quite different angles. These two assumptions doubtless underlie the recent outburst of books and booklets on the outlines or fundamentals of economic theory. Whether the fresh presentation or selection of fact and theory cannot be left to the teacher or to the independent student is open to question. Assuming, however, that a different statement of the subject is required—in print—for different audiences,

then each of the heterogeneous collection of works enumerated above justifies its existence. Each book clearly calls for a quite distinct type of possible reader, and each of these types should receive, in greater or less degree, satisfaction from its appropriate text-book.

(1) Of M. Gide's little book we would speak with the respect due to the author. It appears as the first product of the "Cosmos" Library—" petite bibliothèque de culture générale," and is, we gather, intended not as a text-book but as a general introduction, possibly for children, but essentially for the intelligent adult student of the new generation, " celle qui revient de la guerre et celle qui n'y est pas encore allée," who wants to get some idea of the content of the whole subject before committing himself to its further study. No crabbed economic laws, no doctrines of " margins," await him in this work. Rather does he approach by a sunlit path, surrounded by birds and beasts and honey-bees (the first economic beings), with Seton-Thompson's squirrel stories enlivening the exposition of the theory of property and the origin of capital (as embodied in nuts), to the dozen fundamental conceptions of sociology which, according to M. Gide, underlie all economic theory. "Political Economy has its roots in biology; it is one of the chapters of natural history, that of the genus homo "; and even when the animals are left behind, in order that the student may develop his ideas from the study of more completely economic beings, the reader is still constrained to regard his economic studies as but one aspect of the more general study of the growth of ideas and institutions.

The seven short chapters of the book deal with Wants and Labour; Exchange and Value (the latter " created by the wants of others and therefore containing a strain of immorality "); Money (whose value really depends on " social confidence "); Property and Inheritance. Here we have a description of the change made by the war in the general attitude towards the holding of property, now " well on its way to be a public function." " Private property appears to us like a moment of individualisation between two states of collective ownership—collective in its origin and ultimate destination. . . . It is the trunk of the tree whose roots go into the ground and whose branches stretch to the sky. But the trunk is important, and it would be imprudent (on the part of the socialists) " to cut it through."

Two chapters deal with landholding, rent and interest, and with wages and profits respectively. Economic rent, " for more than a century an inexhaustible theme of meditation and

discussion to the economists," is, as might perhaps be expected, dismissed cursorily, while we are told that "in post-war society everyone will be more or less a 'rentier,' . . . but no one will be able to live on his 'rentes.'" Finally, after a brief discussion of trusts and of schemes for nationalising production, the author introduces us to the consideration of the working of competition and combination, and leaves us to contemplate three contemporary and diverse forms of combination—with complete freedom of choice as to which to select.

The student will, as the professor warns him at the outset, have obtained little definite information as to modern economic conditions in the 177 short pages of his primer. But he will have been introduced in an atmosphere of admirable lucidity and urbanity to some of the fundamental conceptions of pure theory. References to lessons from war experience, indicated, if deliberately not developed, in the book, will have counterbalanced impressions based on the squirrels and Robinson Crusoe and the Sleeping Beauty (demonstrating monetary theory), whom he will have met *en route*, and should have convinced even the most literal-minded that the subject is one of sober as well as of picturesque interest. The reader of the book can hardly fail to be stimulated to ask for more, both of theory and of fact—which is the result that the author by his own statement primarily desires to secure.

(2) No greater contrast to M. Gide's primer could be found than is supplied by M. Journé's book, a treatise dealing mainly with the hard facts of descriptive economics. Each section and chapter of the book begins with a brief digest of theory in its simplest form, after which the author passes on to an account of actual economic structure. Thus he deals successively with the contemporary production of goods and financial, industrial and commercial organisation; with currency, international trade, taxation and debt, wages and the distribution of wealth, as these have been affected, mainly but not wholly in France, by influences of the war and peace. He describes himself on his title-page as M. Journé, "négociant," and it is clearly for the "practical man" (not exactly for the expert in any one line of business) that he writes. Despite all temptation to the contrary, he manages to maintain a wholly objective attitude to the events and developments which he describes (very clearly). Even in the constantly recurring sections on State intervention, in industry, commerce, price control, etc., he avoids any expression of opinion. Almost

the only two points in which he diverges from this attitude of ion are on p. 373, when he refuses to contemplate a tax or levy on capital, and on p. 429 when he, curiously enough, commits himself to so "advanced" a project as family endowment (in the form only of extra payments by the employer for the support of children, wife or dependents).

On other controversial topics, such as the disposal of profits, he preserves a non-committal attitude, and goes no further at the beginning of his final section than to say that "the present economic organisation which we have tried to expound does not satisfy everyone." After which he analyses very briefly the aims of co-operation, syndicalism, and socialism, and (like M. Gide, but after a very different journey) leaves the reader to contemplate their divergence.

To the English reader, the work will appear valuable chiefly as supplying a well-proportioned and accessible summary of French economic conditions during and after the war, with a collection of material drawn from outside sources, sufficient to show the similarity of post-war problems in at least the belligerent countries. The section on taxation and national debts will probably be of most interest from this point of view.

The author has a misstatement on page 432, with regard to the prevention of strikes in England.

(3) The probable *clientèle* of this Text-book of Economics is described by its author rather vaguely as being to be found "not only among university students, but also among that much larger class of persons which feels, since the war, drawn to take an intelligent interest in financial, industrial and commercial affairs." Mr. Briggs refers in his preface to the requirements of students for the London Intermediate Examination in Economics and Commerce, but the book is quite as much suited for a (presumably) rather older student, *e. g.*, of the University tutorial class type, who is prepared to take his work seriously, starts with a reasonably "grown-up" knowledge of current economic questions, and needs to have his theoretical material collected as far as possible in one volume. This is no beginner's easy introduction to the subject. The student is plunged early into marginal theory and kept to its consideration (we would especially draw attention to the author's treatment in this connection of wages theories); for him there is no pleasant soaring in the economic empyrean of M. Gide's primer. But the *bona fide* student, especially the mature student, ought—on the assumption

that he requires one self-contained volume as his main stand-by—to profit by the book, which is a sound and competent statement of modern economic theory, seen in the light of war and post-war experience.

The author gives a good deal more space to the history of economic theory than has normally appeared in text-books of this size, and he contrives to do so in a way which should give life and interest to an aspect of the subject, often uninteresting to the student with inadequate means of supplementing summaries by wider reading. The book as a whole is not, perhaps, stimulating to independent inquiry; the completeness of the efficient text-book does not foster this attitude. But it is in no way a colourless piece of work. The author, though he does not seek controversy, does not shrink from pronouncing definite conclusions, either on points of theory or their application.

(4) This introduction to industrial and commercial geography is one of a series of useful text-books—of which others have been already reviewed in the JOURNAL—written primarily for boys and girls in secondary and perhaps in continuation schools. It aims, according to its author, at supplying the school "equivalent of economics," since, as he justly points out, the schoolboy or girl is not normally ready for economic theory. "The book is called an industrial and commercial geography, but this is merely a matter of names. Economics is the science which treats of men and women 'in the business of getting a living.' What else is industrial and commercial geography?"

The question is perhaps characteristic of the exponent of modern geography, with its far-flung net. It is, however, of little importance whether the book deals in name with geography or economics. It sets out to answer the question, "Why do people live where they do live, and how do they earn a living?" and it does this in a series of short chapters on the world as a whole, but mainly on the position of Britain and the British Empire. This is all interesting and business-like from the teacher's point of view. But the best part of the book is in the ingenious set of exercises at the end of each chapter, with suggestions as to the pupil's means of quarrying material from maps and Government reports and local sources. The study of elementary economic theory, now inserted as a subsidiary subject in so many specialised courses at universities and elsewhere, would be of much more value than at present, if some such previous preparation as this, both in the acquisition of information and still more in the

development of initiative in work on these subjects, might be ▮umed on the part of the average student.

(5) The audience presupposed for the next volume on our list is Indian. This is a lengthy work by Professor Gilchrist, of Krishnagar College, Bengal, composed and printed in India under post-war difficulties which a sympathetic reader can imagine, and designed primarily for the Indian University student. It is not really an economic work, though it overlaps inevitably into "economics" in certain sections dealing with administration and in, *e.g.*, a brief discussion of Socialism. It is an attempt to provide in one volume a compendium of political theory, past and present—the meaning of liberty, sovereignty, political rights, etc.—together with an account of actual political structure, in half a dozen selected countries. There has obviously been a great effort to keep this mass of material in scale. Thus the author reduces, with comparative success, the whole of English constitutional history to sixteen out of his eight hundred pages. (He has not succeeded in being absolutely accurate and up-to-date in the section on English local government.) The presentation of both fact and theory have inevitably suffered from the attempt to compress and yet to be comprehensive. The work, however, is a courageous (and instructive) experiment in the selection and presentment of most unwieldly material for the student who from lack of books or time or other limitations cannot "select" for himself. As such, it should be of definite value in its own birthplace, in any case. It would, further, be well worth while for some too parochially-minded English students to seek perspective by its means, if only for the digests which the book contains of administrative structure in India and Japan, and for the author's Indian point of view, specially interesting at the present in his discussion of the attitude of the state to religion and of representative government.

(6) The last volume of the group to be considered is by no means a text-book, but a brief essay on "some fundamental aspects" of "Physical Economics." Its appropriate audience may perhaps be visualised in an intelligent (and critical) Summer School or a university students' essay society.

The author starts work by coining a new phraseology dealing with economic "entities" (*e.g.*, land, skill—the "real things used in the development of our economic processes"), and "symbols" (*e.g.*, money). Thus equipped, he flings himself

into the question of the remuneration of abstinence and the ownership of capital. "Is the abstinence of the potato-grower when he reserves some of his potatoes for seed an economic entity? On the answer to the question . . . the future course of economic civilisation will ultimately depend." . . . "Clearly the buyers of the potatoes must pay for the seed used, but must they pay in addition for the mere sacrifice or *abstinence* of the grower? . . . Abstinence is negative and things are produced by positive factors—matter, energy, skill. Abstinence is neither an economic symbol nor an economic entity." "In the present, society pays for entity capital (seed) but also—because industry never gets a start—for abstinence as well. . . . In the future when industry has caught up . . . the use of natural resources must carry with it the obligation to produce and reserve the necessary entity capital for the continuance and expansion of industry. The entity capital reserved will be paid for, but no mere abstinence will be paid for."

We have all heard the right of continued payments for "abstinence," and the possibilities of a new production and ownership of capital discussed already, and we shall, doubtless, hear them discussed again. So far the contribution of Mr. Southerns is all to the good, though some readers would find him more helpful if he were less diagrammatic, and would give some space to the mechanism by which industry is to "get a start." But is the new vocabulary of "physical economics" justifiable? Is it really necessary in order to deal with the question of payment for abstinence, to call seed potatoes "primary" (or "secondary" or "tertiary") "economic entities"?

C. V. BUTLER

The Development of Economics, 1750–1900. By O. FRED BOUCKE, Professor of Economics at Pennsylvania State College. (Macmillan Co., New York, 1921. Pp. 347.)

The Theory of Marginal Value. By L. V. BIRCK, Dr. Sc. Pol., Professor of Economics at the University of Copenhagen. (London: George Routledge & Sons, Ltd.; New York: E. P. Dutton & Co., 1922. Pp. 351.)

THE history of economic thought is a useful and fascinating study. To know what the old masters said, especially the many wise things that have stood the test of time, to understand how they came to say those things that have proved less wise, to

trace the gradual development of ideas and to observe the part played by the chances of external incident and personal temperament—something of this is essential to sound judgment and perspective in economic thought; and everyone who helps us in this deserves our gratitude. But a treatise on this subject calls for various qualities—erudition, lucidity in exposition and criticism, insight into the working of the human mind, and some faculty of telling a story. Of these qualities, Professor Boucke possesses erudition in an eminent degree, but with the others he is not equally well-equipped. The following paragraph, which Professor Boucke himself dignifies with italics, is a fair sample of the whole: "To give these disquisitions on moral sense and acquired moral sentiments their proper value it should be remembered that Smith as the founder of Naturalistic economics in England followed the ethics of Hume and Hutcheson, adding, to be sure, his own theory of sympathy. In its beginnings British economics was thus non-hedonistic. But under Ricardianism a decided change takes place. From there on the hedonistic-utilitarian concept dominates economists both on the Continent and across the Channel, so that Sensationalism necessarily forms a part of our historical survey."

Nowhere does it appear that the minds of living men have been at work, puzzling over the problems that have arisen in the actual world, seeking to improve on old explanations, when these have become inadequate. Everywhere it is *'isms:* one 'ism impregnated by another 'ism, and giving birth to further 'isms in a direct line of descent from "Aristotelianism" to "Marginism." Professor Boucke actually gives us three complex genealogical trees (he himself calls them genealogies) to indicate the respective antecedents of British Utilitarianism, Social Science, and the Psychology of John Stuart Mill. The Bible is there, and Greek Metaphysics, and "Modern Science"; along with "Intuitionism," "Universalistic Hedonism," "Historism," "Histiography" and the like.

The structure of Professor Boucke's work raises a question of some general interest. Economic theory has been very largely written by men who were primarily philosophers, or who had at least a strong philosophical bent. Naturally their treatment of the subject was affected, to some extent in substance and to a greater extent in form, by their personal philosophical beliefs; and it is right that an historian of economic theory should be on the alert to detect this influence. But Professor Boucke carries his examination of the philosophical assumptions of economists

far further than this consideration warrants. This, indeed, is his main preoccupation; his book is not so much a history of economic theory, as a history of the *Weltanschauungen* of economic writers. In the case of each of the four main 'isms into which he divides his subject, Naturalism, Utilitarianism, Historism and Marginism, he prefaces a comparatively slight account of the economic theories themselves with a longer and more elaborate analysis of the "premises," theological, metaphysical, psychological, upon which he supposes them to rest. He seems to suppose that the economic doctrines follow from these premises in the same direct manner as the propositions of Euclid follow from the axioms and postulates. It is true that the economists themselves have sometimes spoken as though this was how they reasoned; but it is surely excessively naïve to take such careless phrases *au pied de la lettre.* When a man writes after this fashion, "The natural desire of the individual to promote his own self-interest will lead him to sell in the dearest and buy in the cheapest market; hence when the number of buyers exceeds the number of sellers, the latter will raise their prices," it is absurd to suppose that he is really deducing the laws of supply and demand from the "premise" that a man is actuated solely by his own self-interest. What he is doing is to interpret the economic propositions, which have been established and tested by direct observation, in terms of the psychology which he may either believe in from profound conviction, or may perhaps have accepted uncritically at second-hand. In neither case is the validity of the economic propositions likely to be seriously shaken by later developments in psycho-analysis or herd psychology. Indeed, the notion that the propositions with regard to money and the foreign exchanges, taxation and tariffs, profits and wages, production and population, which have always filled so prominent a place in economic theory could conceivably have been evolved by a purely deductive process from any postulates in the domain of metaphysics or psychology is so fantastic as to make it almost incredible that anyone should entertain it seriously.

Yet this is not only what Professor Boucke implies of economics in the past; it is what Professor Birck practically asserts of modern economics in his *Theory of Marginal Value:* "Our method is deductive; our deduction rests on certain of the results of Psychology (the law of maximum satisfaction and decreasing utility) and on certain objective outside relations, which observation has made into material for our purpose."

"Certain objective outside relations" may, of course, cover

much; but the secondary importance which Professor Birck in fact attaches to them is aptly indicated by their position in this sentence. He represents economic theory as though it were built up on such foundations as "the logarithmic proportion between the quantity of work and the feeling of onerousness" in such a way that the whole superstructure must collapse if these foundations were discredited. Granted this method of approach, Professor Birck's exposition possesses many merits. Without adding much on his own account, he sets out clearly and accurately all the most elaborate developments and refined intricacies of the marginal conception. He succeeds in doing this without any recourse to the differential calculus and with comparatively little use of algebra, preferring to rely on copious arithmetical illustrations. So far as the propositions are of value, his exposition will, therefore, be found helpful by students who are capable of advanced mathematical thought, but unfamiliar with advanced mathematical technique. But the book as a whole leaves an impression of remoteness, of supreme unconcern with reality, which is rivalled by very few primarily expository works. Of this, it is fair to add, Professor Birck is fully conscious; indeed he is impenitent, not to say defiant. "Of course the theory of marginal value does not mean as great a difference from past theories as its men often believe; but it is stamped by a unity and firmness which is due to the fact that we have found a method which permits us to carry through the analysis. The science has undoubtedly lost popularity; it demands of its man a special training in the same manner as Law and Mathematics; it has to an increased extent become a theoretical analysis and has come farther and farther away from what has been termed 'merchants and bank economics'—this branch of the liberal school which seems to have been created by and for the business men in honour of themselves."

This, doubtless, is magnificent, but is it really science? Science, certainly, need not be popular; and it must often keep far away from the problems which seem of immediate interest to practical men. But the ultimate test of the validity and value of any theory must be not its intrinsic "unity and firmness," but the accuracy and perspective with which it explains the facts of the actual world. That merchants and bankers should find the marginal theory difficult to follow is no discredit to it; but if we who do understand the marginal theory are not better equipped thereby for understanding the problems of merchants and bankers, the sooner we abandon it the better. In the reviewer's

opinion, the marginal theory does truly describe and appropriately emphasise many of the most important features of the actual economic world. But it is upon this, and not on the rigidity with which it follows from certain psychological premises that its place in economics must ultimately depend.

H. D. HENDERSON

Die Grundprobleme der theoretischen Volkswirtschaftslehre. By WOLFGANG HELLER, Professor in the Technical High School at Budapest. (Leipsig: Quelle & Meyer. 1922. Pp. 104.)

THE aim of the author is to give an account of the work done in *pure* economics. To watch the coherence of the trains of thought, to join isolated chains of speculation on theoretical problems seems to him a worthy subject of investigation.

First of all, the theory of value is followed down from its classic form to the socialistic dogma of surplus value and to the subjectivist explanations of Jevons, Walras, and Ch. Menger; in the course of which some remarks are offered on the nature of cost. Then the problem of price is dealt with and explained. Whereas the elder theory laid special stress on the analysis of supply, the new one enters thoroughly into that of demand.

The chapter on the distribution of income dwells upon the perception of the circulation process by the physiocrats and by the classic writers, upon the principle of marginal productivity, the residual theory, its connection with the theory of costs, finally upon the part which power plays in the distribution of wealth.

Furthermore, the author treats the generalisation of the rent principle and the absolute rent of land; the theory of interest on capital, from its beginnings with the canonists, down through the theories of productivity and of abstinence, to the theory of premium and to the so-called dynamical view of rent; theories as to the nature of profit and wages, from the precepts of the classical school down to the productivity theory of wages.

Professor Heller has elaborated his personal dogmatic views in his voluminous Treaty (*Közgazdasàgtan*, Budapest, Németh, 1920), published in Hungarian.

E. SCHWIEDLAND

Die Lehre vom Gelde in der Wirtschaft (eight chapters on the theory of money). By RICHARD KERSCHAGL. (Vienna: Manz, 1922. Pp. 64 gr. in 8°.)

THIS book, of which the first edition appeared in 1921, deals with the principles of monetary theory since 1800. The author seeks to explain questions of method in their historical order. One chapter deals with the Ricardian views and the quantity theory. Dr. K. believes that the theory of absolute value was the obstacle in the way of Ricardo's reaching a correct result as to the variations of the value of money. Next he gives an account of the monetary theories of Adam Müller, of Knapp, of Bendixen, of Wieser, who recognised the income problem as an important part of the problems in question, and of S. Gesell, the last a Socialist, not as well known as some parts of his writings—although mixed with blunders and error—would in Dr. Kerschagl's opinion deserve. K.'s own theory seems to be, that the development of money depends on the existence of clearing centres and of the growing importance of the modern state or of governmental administration as a centre of payments. The study of all these is difficult enough, and the explanation, how the "medium of exchange" has become "legal tender" is to be explained in a further book by the same author. An index of literature mentions the principal works about money during the last hundred years and the influence they have exerted on the methodical development of theoretical monetary problems.

E. SCHWIEDLAND

Le papier-monnaie. Par G. SUBERCASEAUX (Bibliothèque Internationale d'économie politique). (Paris: Girard. 1921. Pp. 446.)

El sistema, monetario i la organización bancaria de Chile. GUILLERMO SUBERCASEAUX. (Santiago de Chile: "Universo," 1921. Pp. 404.)

THE author of these volumes is a Professor in the University of Chile and a statesman who has played a great part in the monetary policy of that country. His twofold activities are reflected in his writings, which combine study of general principles

with elaboration of practical details. The general theory of paper money is illustrated by concrete examples. The history and description of the Chilean monetary system is illuminated by reference to first principles.

In the first of the volumes before us the properties of an inconvertible currency are considered under three heads: the origin, life, and extinction of paper money. One of the commonest ways in which the phenonemon originates is through the permission given to Banks, on the occasion of some national crisis, not to cash their notes. Professor Subercaseaux tells once more the story of the English Bank Restriction. Other less familiar instances are furnished by Latin America, where paper money and national crises have abounded. The creation of a forced currency directly, rather than through the transformation of bank-notes, is illustrated by the fiscal notes which the Chilean Government issued on the outbreak of war with neighbouring States in 1879. Among the causes which our author passes in review he assigns a prominent position to the varying currents of popular opinion. As a specimen of the mentality which makes for paper currency, he cites a numerously signed petition which was presented to the Senate of the United States in 1775. "The troubles," so ran this document, "which afflicted the State were not to be cured by building up manufactures (or) by encouraging commerce." These were the things which made the troubles. The true panacea was paper-money. "From the very day on which the bills began to issue from the Treasury, the burden of taxes would grow lighter, debts be discharged with ease, arts and commerce flourish, and the faces of all men wear a contented expression." The partisans of paper-money in Latin America, the "papeleros," actuated by similar convictions, often prevailed; sometimes, when people were suffering from a surfeit of paper-money, the partisans of gold, the "oros," triumphed.

Confidence is essential to the life of paper currency. Given confidence, a currency declared to be eternally inconvertible may be maintained. In fact, however, such a declaration is not made, at least on the introduction of the currency. The importance of the "psychological factor" is illustrated by the case of Japan, where in 1869 the Government tried in vain to float the new paper currency by means of proclamations and penalties, and even the permission to pay taxes in the currency. But when they promised to redeem the notes in thirteen years, confidence was established, and the notes circulated. In this case

depreciation could not be attributed to excess in the quantity of notes issued; on the relation of which to the value of a money the author expresses a well-balanced judgment, assigning to experience and theory respectively their proper weights. He instances cases in which the increase of currency has not lowered the premium on gold, and cases in which the premium has fallen considerably without any reduction in the amount of the circulation. Still the increase in the quantity of money carries with it a tendency to depreciation. The multiplication of notes cannot go on indefinitely without the tendency coming into action, either directly or indirectly, by shaking confidence. It was not surprising that when (Spanish) Columbia increased her currency from three millions of piastres in 1886 to 800 million in 1900, the premium on gold should concomitantly rise from 35 per cent. to 10,000 per cent. We must pass over the explanation and exemplification of many important points in monetary science—the need of that *elasticity* which is proper to a convertible currency, the relation between the foreign exchanges and internal prices, and the rate at which depreciation is propagated to different markets.

One of the most important questions which arises is how to put an end to paper-money. Should we endeavour to restore the old par value of the paper; or, rather, having regard to the present value in gold of the paper unit, the "peso" in the case before us, shall we define the peso to consist of about that quantity of gold? Our author admits that the element of promise latent in almost all paper money is in favour of the former course. But the latter is demanded by economic expediency in order that the functions of money may be properly discharged. Professor Subercaseaux elucidates the question by reference to instances of "conversion" (from paper to gold) in Latin America and other countries. The experiences of Chile are shown in greater detail in the second volume, which we proceed to notice.

The history of the Chilean monetary system may be said to begin with the Spanish invasion; the traces of money among the primitive peoples in earlier times being insignificant. The evaluation of weights and measures used in the colonial period (under the rule of Spain) present difficulties of the kind which Thorold Rogers encountered in his history of prices. Interpreting these "hieroglyphics," as our author well calls these obscure data, he obtains a measure of the purchasing power of money in past times. Here, for instance, are the materials

of an index number expressing the level of prices in 1913 compared with that of 1796

	1796.	1913
Sugar	100	25
Rice	100	25
Certain cotton goods (*Tocuyo*)	100	24
Baize	100	39
Woollen cloth	100	45
Wheat	100	187
Barley	100	185
French Beans...	100	288
Beef (*Animal vacuno*) ...	100	373
Mutton (*Oveja*)	100	807
Totals	1000	1,998
Index number	100	200

We have purposely rearranged Professor Subercaseaux's data so as to bring out the circumstance that the relative prices fall into two groups of very different types; the median of the first five relative prices being 25, of the last five 288. The divergence corresponds to the classical theory that prices of manufactured articles and articles of which the import has been facilitated, tend to fall in comparison with the products which are more nearly raw materials.

The difficulty of interpreting the early monetary history of Chile is aggravated by the prevalence of a bimetallic system with ratio varying from time to time. When one of the metals was under-valued by the authorized ratio it would tend to disappear from circulation. There thus resulted a dearth of currency; one of the circumstances which our author enumerates among the conditions favouring the introduction of paper money. It is therefore remarkable that this substitute for coin should be so late in making its appearance in Chile. Even convertible bank-notes did not flourish there till the middle of the nineteenth century. Our author severely criticises the liberty of emission permitted to the banks at this period. An arrangement unsuited to the circumstances of Chile was fostered by the doctrinaire teaching of Courcelle-Seneuil, if we rightly interpret our author's reference to his distinguished predecessor in the Chair of Political Economy at the University of Chile. The rising generation of statesmen were diverted by that teaching from "the positive observation of the circumstances of economic life" which ought to be, says our Professor, "the leading guides in political economy in general, and especially in Banking." The convertibility of bank-notes was temporarily suspended in 1865 on the outbreak of war with Spain. But it was not

till 1878 that in consequence of war or rumours of war paper money came to stay in Chile. The subsequent attempts to throw off the disease and the continual relapse are graphically described. Very impressive is the picture of the evils attending the use of paper money which Professor Subercaseaux presented in a speech delivered to the National Congress in 1912. Subsequently he served on a Commission appointed to advise on reforms in Currency and Banking. The report drawn up by the Professor recommended the conversion of the paper money at (or in the neighbourhood of) ten gold pennies for the peso, the then prevailing rate of exchange. The measure might have been carried but for the outbreak of the Great War. Chile flourished during the War owing to the demand for her nitrate products to make explosives. The foreign exchange rose high above par; and it might be hoped that cash payments could be resumed at par, with the peso equated to eighteen gold pennies. But the demand for explosives fell off with the cessation of hostilities, and the exchanges had sunk by 1919 to a figure corresponding to about twelve gold pennies for the peso. Such was the position when Professor Subercaseaux was appointed Minister of Finance (*Hacienda*). In accordance with the principles laid down in his treatise he proposed to convert the paper money at about the prevailing rate. There were also salutary provisions about Banking, based on a part of our author's studies which we have not had space enough to notice. But the Bill was defeated by unscrupulous obstruction. Ignorance and sinister interests triumphed over knowledge and wisdom.

F. Y. EDGEWORTH

Trusts in British Industry, 1914–21: *A Study of Recent Developments in Business Organisation*. By J. MORGAN REES, M.A., Lecturer in Economics and Political Science, University College of Wales, Aberystwyth. (P. S. King & Son, Ltd. 1922. Pp. viii + 269. Price 10s. 6*d*. net.)

WHILE this book contains some original material, it is in the main built up out of the reports issued by the Sub-Committees appointed by the Standing Committee on Trusts and the Standing Committee on the Investigation of Prices under the Profiteering Acts, 1919 and 1920. Mr. Morgan Rees has had the opportunity of performing a very useful service to students by reducing these reports to a reasonable size and presenting them in an easily

accessible form, and as he is a lecturer on economics, we have the right to expect that he would treat his responsibilities seriously. In a compilation of this kind the reader must rely on the author not only for the accuracy of his actual quotations, but also for the accuracy of the paraphrasing of those long passages which perforce have to be summarised. The views of the author must also be carefully separated from the conclusions of the Sub-Committees. Care in all these respects cannot be too meticulous, and any serious failure to observe it must destroy reliance on the book. If it has been found wanting when tested, although in the less important details, even those portions which are correct are suspect. The requirements indicated are not excessive, they are merely elementary, and it must at once be said that, judged by them, Mr. Morgan Rees's book is subject to severe criticism. It would have been a pleasure to praise a book which might have been so useful, but, unfortunately, it has many marks of serious carelessness, and it would almost appear that it had not been submitted to ordinary proof-reading. These are grave accusations, and in support of them we will proceed to compare, at haphazard, some sections of the book with the original reports.

The Report on Light Castings (Cmd. 1200) is dealt with on pages 86 to 97. At once on page 88 we find the number of houses under construction in 1891 stated as 87,000, whereas on page 3 of the Report it is given as 84,000. At the foot of the same page is a quotation to the effect that in 1912 the National Light Castings Association "probably represented not far from 95 per cent. of the Light Castings industry"; the correct quotation is "not far from 95 per cent. of the total output of the Light Castings industry," and, as only numbers of firms had been mentioned before, the omitted words are of some importance. On pages 90 and 91 a passage of nine lines is given in quotation marks, which is not a quotation at all but a jumbled summary. The whole of the description on pages 90 to 92 of the pooling arrangements of the National Light Castings Association and of their system of fixing prices with discounts to the various classes of middlemen is muddled. It does not state that the members' quota are based on the average output of each member in the three years prior to his joining the Association, and it does say, quite inaccurately, that "these percentages are not fixed but would vary according to the total output of the members at the end of each year," whereas the Report correctly describes them as "not percentages of a fixed and inexpansible total, but of whatever may turn out to be the total output of the

members at the end of each year"; the percentages, of course, are fixed. Mr. Morgan Rees also states distinctly that the agreements quoted were made with the "Building Materials Supply Committee," whereas they, and especially the one for deferred rebates, were made with the individual merchants, ironmongers, etc. The Building Materials Central Committee is strangely treated; not satisfied with naming it correctly, Mr. Morgan Rees calls it the Building Materials Supply Committee, the Builders' Merchants' Central Committee, the Builders' Materials Central Committee, and the Building Materials Committee; in six references on pages 90 to 92 the Committee only gets its proper name once, and the Builders' Merchants' Alliance is miscalled the Building Materials Association and also the London Area Association. A bad case of adding a remark of the author's own to a piece of paraphrase—imperfect paraphrase at that—occurs on page 92, where it is said: "It was given out that 21 per cent. is the average trading margin aimed at by the Builders' Merchants' Central Committee—a margin not unreasonable for goods of this nature sold from stock, provided the prices to the merchants were fairly reasonable." The proviso, like the title of the Committee, is the author's own; the Report (page 7) says: "We are informed that prices given in the B.M.C.C. list are calculated with the intention of showing an average trading margin of 21 per cent. over the whole range of goods, and that the actual margins vary from $7\frac{1}{2}$ per cent. to $33\frac{1}{3}$ per cent. It was stated to us in evidence that 21 per cent. is necessary in the retail trade to cover stocking, establishment, and distribution charges and as a result of our investigation we are disposed to believe that this percentage is not unreasonable for goods of this nature sold from stock." Mr. Morgan Rees errs both by addition and by omission. Sometimes, indeed, he seems hopelessly incapable of reproducing the sense of a simple passage. The Committee said on page 8: "We have suggested also that owing to the thoroughness with which it was found possible directly to control prices, the pooling arrangement by which production was to be diminished became a factor of little account as regards influence on price." This is transmuted on page 94 into, "On the question of the effects of 'pooling' the Committee reported that the complete control over prices secured by the Association made the reduction of production of little effect." On page 95 there are two paragraphs in quotation marks; the first is practically correct, so are the first two sentences of the second with the exception of three unnecessary prefatory words added by the author and a bad blunder of "1921" for "1920," but the concluding

sentences in parentheses are not in the Report, being the author's comment. Lastly, the quotation on page 97 contains two er

Chapter VII, Section (A), Dyes and Dyestuffs (pages 158 to 169), is also prolific in instances of carelessness. On page 159 aniline oil is called a simple dye, which it is not; the "Höchst-Cassella Group" is transformed into "Hochst Casella Group"; in one place it is said that "our pre-war consumption amounted to 20,000 tons, of which 18,000 tons . . . came from Germany," and a few lines lower down we find that "by 1913 80 per cent. of the artificial dyes used in this country were made by Germans"—but for the author's incorrigible habit of miscopying and so producing such contradictions as the foregoing he would have made the correct statements that in 1913 the United Kingdom used 20,000 tons of synthetic dyes and dyestuffs, 18,000 tons of which were imported, 90 per cent. of the imports coming from Germany, and also that "in 1913 Germany produced 80 per cent. of the world's consumption of artificial dyes"; again, on page 159 it is stated only of the Mersey Chemical Works that they were set up after the passing of the Patents Act. 1907, whereas the Report (Cmd. 1370) says clearly on page 4 that both these works and the Ellesmere Port Works were established to meet the requirements of that Act; at the foot of the page we find that the two dye cartels "also owned jointly all factories in foreign countries," whereas according to the Report the "joint establishment of factories in foreign countries" was alleged as one of the reasons for the combination—a quite different matter; and, finally, the statement in the Report (at the top of page 5) that "it has been asserted that within two years after the combines were organised, the costs for travelling salesmen and advertising were reduced by one-half," is transformed into "as soon as these two groups were organised it is stated they reduced expenses of marketing by half," which, besides being grossly wrong, is not even decent English. This is not bad for a single page, but on page 160 the good work is carried on with the statement that "the Swiss shared ten per cent. of the British trade," the truth being that they supplied something less than 10 per cent. of British imports, and, though we may pass over some bad grammar and a new coal-tar product "ophenol," we cannot forgive the disguising of the well-known firm of Messrs. Read Holliday and Sons as "Read, Holloway & Co." (page 160). The Report is, on the whole, not uncritical of the British Dyestuffs Corporation, and it is somewhat strange to find (page 163) that the Sub-Committee "considers the Corporation has justified its existence"; they did say that the amalgamation—*i. e.* the creation,

not the results, of the Corporation—was, "all things considered, the best interests of the industry, its customers, and the nation." On the top of page 164 the increases in the price of dyes "are accounted for in the Report by increases in cost of fuel, materials, labour, repairs and renewals, but mainly owing to the fact that the new plant and equipment put up at a high cost has to be paid for. . . . This may certainly be as stated, but again we fail to see why all the buildings and plant, etc., put up during the years of the war should be paid for in one or two years by the enormous prices charged to the consumer." The Report states on page 14 (36) that "one, however, of the most important causes of the increase in the prices of dyestuffs was the cost of manufacturing intermediate products"—a point obscured in the summary. The cost of equipping the country with new plant is admitted, but there is no suggestion that this should be paid for in one or two years, and, on the contrary, the Sub-Committee says (page 15 (39)) that "so far as we can ascertain there was no question of dye manufacturers taking advantage of the situation to drive hard bargains with their customers." On page 165 the author says, "this survey may fittingly conclude with a short account of the international position since the Armistice"; this is not his own, as the sentence would imply, but is abstracted from the Report. Weariness prompts us to pass over various misprints, but we cannot refrain from a smile when on page 166 Mr. Morgan Rees, after alluding to the profitableness of selling "bad English dyes for a good price," gives the sad experience of a friend of his in buying permanganate of potash. Was no case of "bad English dyes" at hand?

Finally, let us turn to Meat (pages 177 to 187), and here we will only take a few examples of carelessness. Messrs. Cudahy will be astonished to find themselves alluded to on page 179 not only as "the Cudahays" but possibly under an entirely new title on line 4; as punctuated, the passage runs, "five corporations—Armour & Co., Swift & Co., Morris & Co., Wilson & Co. and Inc and Cudahy Packing Co." Perhaps, however, "Inc" is associated with Wilson & Co. and not with Cudahy, but there is no Mr. Inc; there is "Wilson & Co. (Inc.)," *i.e.* "Incorporated"—the proper title is given lower down. Mr. Morgan Rees or his copyist should either be uniformly incorrect or uniformly correct. This is only a little bit of comic relief, but really the well-known bacon firm of Messrs. Marsh and Baxter of Brierley Hill should not be parodied on page 184 as "Messrs. Marsh & Buxter of Brier Hill." More serious is the very faulty description of Vestey Brothers,

Ltd., on page 182, which is so gross that only the "deadly parallel" meets the case. The book says: "One of the most interesting British Companies is that of Vestey Bros. controlled by English owners resident abroad. . . . Vestey Bros. control also:— 1. The Union Cold Storage, Ltd. 2. Other meat works in Australia and New Zealand operated by W. & R. Fletcher, Ltd. 3. W. Weddell & Co., Ltd. 4. The Colonial Consignment and Distribution Co., Ltd., who are large importers of Australasian produce. 5. Multiple shops, retail companies of W. R. Fletcher. 6. The Argentine Meat Co., Ltd. 7. Eastmans, Ltd." For errors and omissions this can hardly be beaten: the Report, Cmd. 1057, page 8 (19), says:—"The interest controlling this British registered company controls also The Union Cold Storage Co., Ltd., subordinate companies with meat works in Argentina, Brazil, Venezuela and China; meat works operated by W. & R. Fletcher, Ltd., in Australia and New Zealand, and Nelson Bros., Ltd., in New Zealand, W. Weddell & Co., Ltd., and the Colonial Consignment and Distribution Co., Ltd., which are large importers of Australasian produce, and the multiple shop retail companies of W. & R. Fletcher, Ltd., the Argenta Meat Co., Ltd., and Eastmans, Ltd." One other example must suffice. At the top of page 183 we find: "Our control or ownership of shipping was one effective method of control over meat supplies moving from the United Kingdom elsewhere. Therefore, to prevent British meat supplies falling under the domination of foreign interests, reserve powers in regard to the ownership and control of insulated shipping should be secured by the Government." The whole passage is a travesty of the recommendation of the Sub-Committee "that the control of insulated shipping would afford one effective means of preventing British meat supplies from falling under the domination of particular interests, and that, accordingly, the Government should be equipped with such reserve powers, and should maintain such relations with the shipowners, as would prevent the diversion of meat supplies from the United Kingdom and the wholesale transfer of British insulated shipping to foreign ownership" (page 13 (5)).

The reader must judge for himself, but the present writer declines to trouble himself about the rest of the book. Students will be well advised to go to the original documents, and one may venture the suggestion to the Stationery Office, that it would be an excellent paying proposition to reprint the whole of these valuable reports in a cheap and handy octavo form.

HENRY W. MACROSTY

Versicherungswesen. Vol. I. Allgemeine Versicherungslehre; Vol. II. Besondere Versicherungslehre. By ALFRED MANES. (Leipzig and Berlin: B. G. Teubner, 1922. Pp. xiv + 231, and xiv + 357.)

EIGHT years elapsed between the publication of the first and second editions of this treatise, and similarly eight years separate the issue of the second and third. During this latter period there has taken place, as Dr. Manes puts it, the first act of the world revolution.

One is tempted to wish that the results of this revolution on insurance generally had engaged more of the author's attention. Not that such a record would have been particularly sensational, for only in Russia, as Dr. Manes remarks, has there been any actual collapse of insurance, and then not because it was insurance but simply because it was something stable and as such had to go. In other States insurance institutions emerged from the earthquake in no worse plight than the rest of the capitalistic furniture, and when it came to sweeping up the bits it was for the most part fantastic City Equitables which were found among the *débris*—about as substantial still as they ever had been—and not the wreckage of anything more considerable.

In England the newer companies of the respectable sort are just now having their troubles, because in many cases they had forgotten to bear in mind that their large war profits, particularly when derived from marine business, contained a large liability; but most of them will probably emerge, though a bit dishevelled. The great composite concerns, on the other hand, which largely control the insurance market, whilst compelled since the early days of the War to write off enormous sums for depreciation in their investments, had already sunk their roots too deeply to be even shaken. True, falling values and curtailed activity in industry have meant falling premium incomes, and the incomes of insurance companies are in any case largely based on the pre-war valuation of money (for insurance was one of the few things, like the teaching of economics, which did not go up in price much during the boom), and working expenses and loss reinstatements are based, of course, on the new valuation, which is an unfortunate combination, to say the least of it. None the less the collapse of a single large tariff insurance company would perhaps be an even more surprising event than the failure of one of the big joint stock banks.

To-day the business of insurance occupies such a prominent

position in any civilised country that a survey of it implies a survey of all the leading features of its social and political a It has so many points of contact with the life of the community that the phenomenon of a world revolution, even though the effects are not actually sensational, cannot fail to be productive of many far-reaching and arresting results. Hence the temptation to wish that the author had turned the third edition of what has already been referred to as a treatise into a breezy chronicle of economic change. It would, of course, be about as logical to wish that Milton might have been instead a contributor to *Punch*. The treatise is a splendidly systematic one of the sort which has never been attempted on the subject in English, and of the sort which the present reviewer (who very gratefully acknowledges none the less the help which years ago he received from the earlier editions) would not find it altogether easy now to sit down and read from end to end. It is, that is to say, an exceedingly sound of work, and in fact covers the ground so completely that the task of the reviewer, searching for some oversight or omission wherewith to justify himself, is made hopelessly difficult. It need hardly be added that whilst refusing in any way to pander either to our natural indolence or our inherent desire for the sensational, Dr. Manes does carefully notice and label the various legislative and administrative changes which have taken place: throughout the two volumes indeed he marshals his facts with a precision of which any drill-sergeant might be proud, so that it almost becomes a presumption to look for one of them out of place or wrongly accoutred. It only remains for someone on the look-out for a quiet winter's work to prepare an English edition. From the point of view of the large public now actively engaged in the profession of insurance, as well as the professional economists, who cannot venture to be altogether ignorant of such a far-reaching economic institution, it would be well worth the labour.

A. FINGLAND JACK

Il Fallimento della Politica Annonaria. By UMBERTO RICCI. (Florence: "La Voce." 1921. Pp. vii + 493.)

Aspetti Sociali ed Economici della Guerra Mondiale. By ACHILLE LORIA. (Milan: Vallardi. 1921. Pp. xii + 458.)

PROFESSOR RICCI of the University of Pisa is one of the outstanding figures among the younger generation of Italian

economists. He will need no introduction to those who are acquainted with the admirable statistical year books published by the International Institute of Agriculture at Rome, where he is head of the statistical department. His previous contributions to economic theory and to current economic controversy are distinguished by the gifts, not too common in combination, of lucidity, subtlety and caustic humour.

These characteristics reappear in his latest book, which is a critical study of the policy of the Italian Government during, and immediately after, the war in regard to currency, price-control, rationing, etc. He passes a severely adverse judgment both upon the principles of the policy adopted and upon its detailed administration. In his view, a system under which "the distribution of necessaries and the fixing of their prices fell into the hands of the bureaucracy" resulted in a check to production when a stimulus was needed, and a stimulus to consumption when a check was needed; in the destruction of foodstuffs on a large scale, through faulty storage, etc., at a time when they were specially precious; in large Budget deficits and in much unnecessary suffering, "which drove even the most quiet people to exasperation." Thus bureaucratic interference, "seeking to save the people from want and inequality, caused universal impoverishment" (pp. iii, iv).

Professor Ricci supports these general criticisms by a detailed examination of governmental regulations, interspersed with some lucid expositions of first principles. He begins with a study of the rise of prices in Italy, predominantly attributable, as he shows, to the output of paper money. Interesting comparative tables of production, prices and currency during successive periods illustrate, with a remarkable degree of accuracy, the quantity theory of money in its simplest form (chap. ii). It does not appear that any expectation of continued inflation perceptibly influenced Italian prices. In this connection Professor Ricci does not enter into any lengthy discussion of banking and "bank credits," in mystifications concerning which so many writers are apt to lose their way, but takes a simple view, similar to that of Professor Cannan. "If the State prints new pieces of paper and gives them to the banks, which lend them to private individuals, who lend them to the State, which uses them for making payments, these loans are only a little game. . . . Prices rise, not because of such loans, but because of the increase of paper money" (pp. 69, 70). A large part of the inflation could, and should, have been avoided,

in Professor Ricci's opinion, by an earlier increase of the price of tobacco—in Italy a state monopoly—and of the taxes on war incomes and inheritances, by a more intensive propaganda on behalf of the War Loans and the adoption of War Savings Certificates on the British model (pp. 81–3).

Turning to the "war-controls" in the narrower sense, he gives a number of examples of production being checked through the fixing of prices too low, and criticises the prohibitions and restrictions on the movement of food-stuffs from one part of Italy to another (pp. 124 ff.). It is an interesting feature of Italian public administration during the war that not only the central government, but also the provincial prefects, often forbade the export of food-stuffs from particular provinces, while sometimes even the mayors of communes forbade export across the communal frontiers. The object of these regulations was twofold, to prevent local shortages of food-stuffs and to economise the means of transport. But Professor Ricci contends that in both respects, owing to bureaucratic incompetence, they did more harm than good. Another line of Government policy, directed against profiteering by middlemen, was the encouragement, by subsidy and otherwise, of the co-operative societies (pp. 161 ff.). Professor Ricci is unsympathetic to this policy, and gives a few local examples of its failure. But a broader survey of its effects would have been interesting.

The rationing system was applied in Italy to a wide range of commodities, including bread, "paste goods," maize, rice, olive oil, bacon, butter, cheese, meat, preserved fish and sugar (pp. 184, 185). After the Armistice rationing was gradually discontinued, but in the spring of 1920, owing to a shortage of food-stuffs, which occasioned much popular agitation, it was reintroduced as regards bread, "paste goods," maize, rice and sugar, while two meatless days per week were instituted. Professor Ricci stresses the theoretical imperfections of any rationing system and dwells upon the evasions practised in Germany and Austria. He makes no reference to the comparative success of the British arrangements. He complains that the Italian rations were in some cases, *e.g.* bread and sugar, fixed so high that an increase in total consumption occurred, whereas in his view a diminution was called for, that in the Army much bread was wasted, and that in the country districts it was often fed to beasts, because at the rationed price it cost less than forage. So far as the Army is concerned, the present reviewer remembers that, where Italian and British troops were in contact, an

exchange of Italian bread for British bully-beef was habitual, and probably beneficial to both parties. Further, an increased consumption of food, as compared with peace-time standards, was a necessary condition of military efficiency. The war ended with the triumph of the well-fed armies and the collapse of the hungry; the Italian army itself was better fed under Diaz at Vittorio Veneto than under Cadorna at Caporetto. Among the civilian populations also the condition of the stomach was a rough measure of *moral.* For these reasons, it may well have been a wise military policy for the Italian Government to augment the normal Italian consumption of food-stuffs by large purchases from abroad. Throughout his book Professor Ricci makes very little allowance for political considerations. It may be that, as he alleges, there were too many officials at work, that they were ill-chosen and inefficient, and that many of their regulations were economically bad. But, if these regulations gave to uninstructed minds even a temporary illusion of economic security, they may have been justified from the standpoint of politicians aiming at military victory and civilian endurance.

Professor Ricci is on stronger ground in his criticism of the *Consorzi Nazionali di approvigionamento* (pp. 411 ff.), which were created by the Government after the Armistice as a half-way house between the war-controls and the decontrolled economy of peace. These bodies were given the monopoly of purchasing and dealing in certain commodities, both imported and home produced, the Government fixing the home selling prices. He adduces a good deal of evidence to show that they worked badly. So far as the war period is concerned, he sketches briefly (pp. 437-440) the policy which he thinks should have been pursued. The Italian Government should have made better terms with its Allies, more especially at the moment of entering the war, for the supply of food, war materials and shipping. It should have made more use of business men in high administrative posts, and of existing business organisations in place of specially created bureaucracies, more especially for the conduct of foreign trade. In general, there should have been no fixed prices, no prohibition of imports and no restrictions on the internal movement of commodities. The largest possible opportunities for private profit should have been left open, and war fortunes should have been subjected, as they accrued, to "reasonable taxation." Rationing should have been limited to a very small number of commodities, and should have been only partial.

A small ration at a low fixed price should have been guaranteed to all, but the rest of the supply should have been sold freely for what it would fetch. These are interesting proposals, for some of which a strong case can be made out, but their political adequacy is open to question.

Professor Loria's new book deals with various aspects of the war, its causes, its cost, its immediate and its more permanent effects. Much that he says is familiar, but even in the treatment of well-worn themes his native originality is never wholly absent. Believing in the "materialist interpretation of history," he is sometimes apt to push half-truths too far. Thus he believes that it was solely at the instigation of British, French and American capitalist groups, which had obtained railway and other concessions in Jugo-Slavia, that the Allied Governments resisted the Italian claim to Fiume (pp. 76–9). In any case, opposition would have been greatly modified if the Italian Government had undertaken to make Fiume a free port. But wise undertakings of this kind run counter to the economic spirit of an age which regards the idea of free international exchange as both unpatriotic and insane. Differing from Professor Ricci, Professor Loria thinks that, on the whole, the rationing and price fixing of the war period worked well (p. 218). Differing, again, from most economists, he advocates a return to the pre-war gold value of continental currencies, to be achieved, in the case of the Italian lira, in about ten years, by means of special taxation during this period, roughly proportional to incomes, the proceeds being devoted to the cancellation of redundant paper money (pp. 340–4). But he is among the orthodox in favouring a capital levy for the redemption of debt (pp. 398–401), and cites a number of ancient authorities, including Petty, Davenant and Archibald Hutcheson, in favour of such a policy. He draws an interesting parallel between the present preoccupations of economists and those of Ricardo and his followers, who also wrote in a period immediately following a great war (pp. 446, 447). In both cases, in his view, war has had "a peculiarly harmful influence upon economic science by restricting its field of vision to commercial phenomena, to the foreign exchanges and to questions of taxes and loans," to the exclusion of more fundamental questions of property and the evolution of the capitalist system. Thus to-day "the ECONOMIC JOURNAL, the great organ of English economic science, has become a mere supplement to the *Economist*, the adviser of the bankers, and Ricardo seems more modern than ever, since our

economic thought is once more confined within the narrow boundaries of his day."

HUGH DALTON

La Teoria di Marx della Miseria Crescente. By ROBERTO MICHELS. (Torino: Bocca. 1922. Pp. viii + 244.)

Lezioni di Scienza Economica Razionale e Sperimentale. By ALFONSO DI PIETRI-TONELLI, with a preface by Vilfredo Pareto. (Rovigo: Industrie Grafiche Italiane. Second edition. 1921. Pp. viii + 907.)

PROFESSOR MICHELS makes an interesting contribution to the history of the development of economic ideas, and gives evidence of a very wide range of reading among authors of many nationalities through several centuries. He finds germs of the "theory of increasing misery" in the writings of Frenchmen in the seventeenth century, and exhibits these germs multiplying and spreading with the passage of time. The theory is closely associated by several early writers with the theory of population, as by Giammaria Ortes, the forerunner of Malthus, in 1774. Later it came to be associated with increasing industrialism, as by Sismondi, the forerunner of Marx as regards "surplus-value" and of Hobson as regards "under-consumption," in 1827. Fourier, writing in 1821, stands on the dividing line between these two periods, attributing increasing misery partly to industrialism and partly to the excessive subdivision of agricultural land. Later, again, belief in increasing misery became a source, no longer of despair, but of revolutionary hope. Professor Michels shows clearly that Marx can claim little originality in this, any more than in his other leading ideas. He also recognises that, taking the nineteenth century as a whole, the theory of increasing misery is contradicted by statistical evidence in England and elsewhere, chiefly, in his view, owing to the growth of Trade Unionism. But he thinks that "psychologically" it may have been true, or, in other words, that the increase in the material welfare of the poor may have been outweighed by increasing consciousness of unequal distribution. He traces the origin of the saying that "the rich are growing richer and the poor poorer" to *The Effects of Civilisation on the People in European States*, by Charles Hall, published in 1805.

Dr. Pietri-Tonelli has produced a formidable tome, which would have been more conveniently published in two volumes,

or, better still, in a single volume much abbreviated. The author belongs to the school of Professor Pareto, who contributes a short preface. The general idea of the book is a study of "economic equilibrium," both static and dynamic, and the author works out in great detail a number of problems of value. But the discussion is so overloaded with tables of statistics, graphical representations, systems of algebraic equations and long lists of authorities as to be almost unreadable. It does not appear to contain much that is new, and, though considerable space is devoted to trade fluctuation, the author does not seem to be acquainted with the large and growing volume of work on this subject by English and American economists.

HUGH DALTON

Esquisse d'une histoire du régime agraire en Europe aux XVIII^e et XIX^e siècles. By HENRI SÉE. (Paris: Marcel Giard. 1921. Pp. 276. Price 15 francs.)

THE remark of E. A. Freeman, that "in order to write a small history you must first write a large one," may be an over-statement prompted unconsciously by its author's inveterate verbosity; but to attempt a summary survey of an enormous historical field before anybody has wrestled adequately with its problems in a *magnum opus* is bold to the point of rashness. Yet this is what M. Sée has done. It is true that the subject of his *Esquisse* is not quite so vast as its title suggests. Except for a few incidental references to conditions in Piedmont, the lands of southern Europe—Spain, Italy and Greece—are entirely excluded, while practically nothing is said about Switzerland, Belgium, Holland, Sweden, or Norway. But even thus limited, the field covered by M. Sée's book is too large and has been too little subjected to comprehensive comparative studies to lend itself to the kind of treatment he gives it. In such a case a first-hand knowledge of primary authorities is hardly to be expected: the real trouble is that the secondary authorities, upon which reliance is necessarily placed, consist almost entirely of monographs dealing, at most, with single countries or districts, or with particular aspects of the agrarian situation. To deal satisfactorily with such material and make it the basis of an instructive synthesis requires much more intensive thought than has apparently been given to the writing of this book, which, in this respect as in others, falls far short of the standard

set by Dr. Clapham in his *Economic Development of France* [illegible] *Germany*, 1815–1914.

M. Sée's knowledge of the monograph literature is unquestionably extensive; but it is uneven. Though he has made use of such recent books as Van Houtte's *Histoire économique de la Belgique à la fin de l'Ancien Régime*, A. de Calonne's *La vie agricole sous l'Ancien Régime dans le Nord de la France* (3rd edition), and Mr. Gooch's *Germany and the French Revolution*—all of which were published in 1920—he not only makes no reference to Sartorius von Waltershausen's *Deutsche Wirtschaftsgeschichte*, 1815–1914 (which, as it too was only published in 1920, might pardonably escape attention until the *Esquisse* was in the press), but also shows no knowledge of the work done in English agrarian history by Dr. Gay, Mr. A. H. Johnson, Mr. Tawney, Dr. H. L. Gray and the late Sir Edward Gonner, while the edition of Lord Ernle's book to which he refers is that of 1888.

The *Esquisse* is very largely a mere narrative of facts geographically arranged, and, what is surprising in a book by a French scholar, the style is dull and uninteresting. Even so it would be an extremely useful book, if its accuracy could be depended on. But M. Sée is not the most accurate of writers. The section which deals with England contains some strange misconceptions. We are told that the enclosures of the Tudor period slackened after 1530 and still more after 1550 and came to a sudden stop (p. 87)—a thesis which was tenable twenty years ago, but cannot be maintained in the face of the researches made by Gonner, Miss Leonard, and Dr. Gay, at least in so far as the movement created a social problem, though it is no doubt possible to hold almost any opinion in regard to the counties where enclosures were carried out silently—roughly the counties furthest from the Midlands. We are told again that the drainage of fens was undertaken in the second half of the eighteenth century: it is mentioned along with the construction of canals, so that XVIII cannot be a mere misprint for XVII (p. 89). It is of course a fact that the seventeenth-century drainage of the fens was far from being complete or satisfactory: the Reports to the Board of Agriculture of 1793 and 1794 make it clear that much still required to be done. But this need not disturb the general truth that the fens were "undertaken" in the earlier century. No doubt M. Sée has based his statement on M. Mantoux' account of the drainage works in the fen country between 1757 and 1780, and possibly M. Mantoux is right in

giving greater prominence to this movement than other writers; but M. Sée does not even mention the earlier enterprises, [illegible], unlike the author of *La Révolution industrielle,* uses language which might be taken to imply that drainage was only begun after 1750.[1] The same page contains less equivocal errors. We read that the example of Lord Townshend was followed by other landowners "*comme le comte de Norfolk*" (surely an eponymous hero invented to account for the Norfolk husbandry, or else a misdescription of Coke[2]), and we are given as an example of an improved rotation the amazing sequence: peas, wheat, barley, oats—"*On vit s'introduire des assolements continus sans jachère, comme celui-ci: pois, froment, orge, avoine.*" Elsewhere language is used which seems to imply that a copyholder towards the end of the Middle Ages was a "freeholder" who held for three lives; but the sentence is ambiguous (p. 82). In speaking of the period of parliamentary enclosures M. Sée says definitely that the movement for the enclosure of wastes and common pastures preceded that for the enclosure of the arable fields (p. 97). The truth is just the opposite.[3]

The second part of the book, which is concerned with the emancipation of the peasantry (while the first part is a description of the agrarian systems of different countries before that movement began), opens with a few sentences about the general causes of the enfranchisement. Here stress is laid upon economic factors:—"*On saisit les causes déterminantes du mouvement d'affranchissement. Ce sont d'abord les idées d'émancipation, propagées par la philosophie du XVIII^e siècle. Ce sont ensuite et surtout les besoins économiques, le souci d'accroître la productivité* (pp. 187–188). But as a general rule M. Sée is inclined to emphasise political rather than economic factors in the history of the movement. It is by political conditions, for example, that he accounts, at least very largely, for the divergent course of the evolution in Austria, as compared with Prussia—its early start under the personal rule of Joseph II, its stagnation in the period of aristocratic reaction which followed his death, its definite accomplishment on radical lines as a result of the Revolution of 1848. A political factor—the wars of the period 1789–1815—created a tendency among the Austrian peasants to divide their holdings among their children, because

[1] See Paul Mantoux: *La Révolution industrielle* (1906), p. 151.

[2] Coke of Holkham is, however, separately mentioned on the same page.

[3] See A. H. Johnson: *Disappearance of the Small Landowner* (1909), pp. 90, 94. The maximum of "waste" enclosures was reached after the flood of "common field" Acts had begun to ebb.

by this means they could save their sons from military service. [illegible]s also in the forefront of M. Sée's explanation of the similarity between Austrian and Prussian conditions before the emancipation—that prevalence of *Gutsherrschaft* which distinguishes both these countries from the more western regions of the continent with their *Grundherrschaft*.

M. Sée thinks that the importance of Stein's work as a factor in the history of Prussian emancipation has been exaggerated, and, in regard to the controversy about the influence of French revolutionary ideas upon him, sides definitely with Meier as against Lehmann. Nothing is said, however, about the influence of English ideas and institutions either upon Stein, who received their impact both by way of Hanover and through his visits to England in 1786 and 1787, or upon Hardenberg, whom Meier asserts to have been filled with the ideas of Adam Smith. But there is no reason to suspect anything "tendencious" in this omission. The influence of English writers upon agricultural progress in France in the eighteenth century is duly noted (p. 43), and the efforts made by Frederick the Great to introduce English agricultural methods into Prussia are also mentioned (p. 141).

In spite of Aulard's verdict of "non-proven," M. Sée maintains that there was a definite increase of feudal burdens in France in the latter days of the Ancien Régime. On the other hand, when he puts the total number of serfs on the eve of the Revolution at not more than a million and says that perhaps even that number is too large, he is in agreement with Aulard, who rejects the total of 1,500,000 given by Carré and suspects that it has no other foundation than a propagandist pamphlet by the Abbé Clerget, published in 1789.[1]

REGINALD LENNARD

The National Resources of South Africa. By R. A. LEHFELDT, D.Sc. With a Preface by the Right Hon. J. C. Smuts. (London: Longmans, Green & Co. 1922. Pp. 79.)

IN this short study Professor Lehfeldt offers an estimate of the total income of persons in the Union of South Africa *circa* the year 1918. The material at his disposal was very imperfect, but he has used it with great caution and allowed a good margin for error. We must be prepared to read at least ± 10% after every item in his Summary table (p. 77), which is as follows.

[1] See A. Aulard: *La Révolution française et le Régime féodal* (1919), pp. 7–8.

INCOME IN THE UNION OF SOUTH AFRICA, *circa* 1918.[1]

Summary.

(In million £.)

	Total income.	Income of coloured population.	Rent.	Interest.	Wages.[2]	Profits.
Farming	40·3	11	7	2	31	—
Mining	22	7·4	2	2	19	—
Manufacturing ...	22·2	3·2	—	4	12[3]	6
Transport	6	·7	—	—	6	—
Merchanting	15	-	—	3	5	7
Professions	2·4	—	—	—	2[3]	—
Government Service ...	11·3	·8	—	—	11	—
Domestic Service ...	5	5	-	—	5	—
Occupation of houses	13	—	3	10	—	—
Total	137·2	28·1	12	21	91	13

[1] Heading not given in the original.
[2] Including salaries.
[3] In the original these numbers are interchanged by an unfortunate misprint.

It is interesting to see that the net produce of farming, which is intended to include produce consumed on the farms, is much greater than that of mining or manufacturing, and that manufacturing produces for the citizens of South Africa as large an income as mining; manufacturing includes building and railway-works and is mainly for the local market. The distinction between interest and profits is not made clearly, and indeed a good deal of the explanation is too sketchy. Besides the income included above, £5,000,000 from mines and £3,000,000 from railways is paid to foreign shareholders, and an unknown amount should be deducted from manufacturing profits in the same way. The proportion of wages and salaries to rent, profits and interest is said to be 2 to 1; but if the profits paid abroad are included, as surely they should be, we have wages and salaries £91 millions; rent, interest and profits over £54 millions; and wages therefore under 63% of the total, not 67%. In the United Kingdom in 1911 the proportion in *manufacture* was estimated as 68%, but of the whole home income only 58%. The proportions are therefore not very different in the two countries.

The income accruing to the white population (1,442,000 persons) was only £74 per head in 1918, a sum which seems small, however it is regarded. Retail prices in South Africa were estimated to be 31% higher in 1917–18 than before the war, and some part of the money income is therefore to be attributed to high prices, though of course the inflation has never been

so serious in Africa as in England. After a series of rough and not very trustworthy estimates Professor Lehfeldt comes to the conclusion that the average purchasing power per head of the white population in South Africa in 1917–18 was no greater than in the United Kingdom in 1913. This conclusion will be surprising to those who supposed that the level of living in South Africa was high; the explanation is that much of the wealth of the country goes to foreign owners, and that, though skilled men's wages were up to £5 or £6 a week, and the bulk of unskilled work is done by natives, yet a great part of the white population are engaged on farms, from which the receipts are by no means large either to occupier or labourer.

The book is not confined to statistics, but contains some analysis of the potentialities and probable future of mining, industry in agriculture in South Africa and some rather hasty economic generalisations. It suffers from compression, and it may be hoped that it will be re-written in such a way as to bring out the statistical analysis more clearly and with more adequate definition and explanation, and to separate the numerical statements (which are valid within definable limits) from the less definite opinions of a non-statistical character. In such a new edition *income* should be written instead of *earnings* in the context of p. 18.

A. L. BOWLEY

The I.W.W.: A Study of American Syndicalism. By PAUL FREDERICK BRISSENDEN, PH.D. (Columbia University. 1920. Pp. 438. Price $4, cloth; $3·50, paper.)

THIS book forms Number 193 or Vol. LXXXIII of *Studies in History, Economics, and Public Law*, edited by the Faculty of Political Science of Columbia University, and the qualifications of the author are that he was sometime Assistant in Economics at the University of California, University Fellow at Columbia, and Special Agent of the United States Department of Labour. It was first published in 1919, and the present is the second edition.

Dr. Brissenden's object is to tell the truth about the Independent Workers of the World—the "Wobblies" in Western slang—for, he says in his preface, "the public has not been told the truth about the things the I.W.W. has done or the doctrines in which it believes. . . . The popular conception of this labour group is a weird unreality." He quotes the sheriff of a small

Western town, who told a high official of the Federal Department of Justice "that they were 'having no trouble at all wit Wobs.' 'When a Wobbly comes to town,' he explained, 'I just knock him over the head with a night stick and throw him in the river. When he comes up he beats it out of town.'" In their turn the Wobblies were out to scare the capitalist, and people who saw the song about "Casey Jones—the Union Scab" who wouldn't join the strike—

> "Then some one put a bunch of railroad ties across the track,
> And Casey hit the river with an awful crack"—

were not likely to disbelieve the newspaper reports of crime and outrage.

"One Big Union," "the General Strike," and "control of industry by the workers" are ideas of respectable ancestry and antiquity, and, unfortunately, violence has stained the labour movements of all countries. What stands out in the history of the I.W.W., in the opinion of a British reader, is its immense futility and incapacity. Founded in 1905 by groups who were convinced of the ineffectiveness of current unionism to redress grievances, it followed in the path already trod by the Knights of Labour and many earlier and later labour and Socialist groups, and again issued the clarion call to all workers to unite and throw off the yoke of the oppressor. At the first convention 43 organisations with about 143,000 members were represented, and 61 individuals (like Debs, Simons, etc.) also attended. The ideas represented were as heterogeneous as the trades. At the second convention in 1906 the "proletarian rabble" under De Leon deposed the president Sherman, who stuck to his office, and the quarrel went to the Courts of Law! By the beginning of 1907 the Western Federation of Miners, the strongest industrial unit in the infant organisation, ceased to belong to the I.W.W. "This frenzy of squabbling," as Dr. Brissenden calls it, passed for a moment to allow great, and not illiberal, schemes of organisation to be planned, and the loss of the most "reputable, best financed, and most respectable elements . . . tended to give sharp definition and emphatic impulse toward a more revolutionary policy" (p. 177). A brief period of success for the mass organisation policy came at Goldfield, Nevada, in 1907, but it was followed by several failures, and the panic of that year nearly wiped the I.W.W. out of existence. Another split was by now due, and it came in 1908, when the De Leon or Socialist Labour Party (revolutionary Marxists) and the non-political St. John-Haywood group separated

into hostile organisations. Both retained the same name, but [illegible]rect-actionists were of the truer faith.

Strikes and a campaign for free speech—"refinement is not the Wobblies' long suit"—occupied 1909, and alleged membership grew to about 18,000 in 1912--misleading figures, says our author. Preaching sabotage led to quarrels with the Socialists, but the success of the great Lawrence strike in 1912 created visions of "No God! No Master!" in a new world. Constitutional quarrels again came--a fight against "centralisation," and, quite separately, the advocacy (aided by Tom Mann in 1913) of a policy of converting existing trade unions by "boring from within" instead of "hammering from without." In 1917 there were 60,000 paying members, and the I.W.W. had spread from the United States and Canada to Australia. Coincidently, numerous laws were passed by the Western States against "criminal syndicalism" or sabotage, and in 1918 Haywood and other leaders were sentenced to long periods of imprisonment for anti-war activities. In 1919 there were 35,000 members.

Dr. Brissenden thinks that the propaganda of the constructive ideas of the I.W.W. will continue, but that "the Wobblies are grotesquely unprepared for responsibility." He obviously regards the charges of violence—in which the public are more interested—as exaggerated, but on this point readers will form their own opinions. There is an excellent index and bibliography, and appendices deal with "Father Hagerty's Wheel of Fortune" (a diagrammatic classification of the industrial population), the I.W.W. Preamble, membership statistics, structural organisation, local unions, strikes, anti-I.W.W. statutes, and a selection of I.W.W. songs as revolutionary in rhythm as in sentiment. Altogether this is an admirable and very readable book, a pathetic study in social pathology.

HENRY W. MACROSTY

Violence and the Labour Movement. By ROBERT HUNTER. (New York: The Macmillan Company, 1919. Pp. xiv + 388. Price $1.50.)

THE author of this work is a strong advocate of political action for achieving the social revolution, and his book appears to aim at indicating, by appeals to history and experience, the programme and methods of Marx, against those of Bakounin, "the father of terrorism." The preface suggests that it was written prior to the war, and places its origin in the events of

1911–1913, which led the writer to re-state the case for political action.

The first part of the book traces the history of the Terrorism in Western Europe. It begins with a chapter on the life of Bakounin, and devotes others to main features or personalities in the movement. The concluding chapter of the part contains an attempt to analyse and explain the causes of terrorism and the psychology of the terrorist. Here the author often shows a real power to understand the point of view of the other side, whilst clearly exposing its errors and fallacies. Throughout the book he pleads strongly for constitutional methods, illustrating from the experience, for instance, of America and France, the tendency of anarchism to strengthen reaction. The relation of anarchism to egoism, and its tendency to subordinate social to individual influences, are well brought out. Thus the terrorist "looks upon all social evils as the result of individual wrong-doing," and is therefore "led inevitably to make war on individuals," whilst the socialist attributes such evils mainly to economic and social causes. The author's power of seeing other points of view is, unfortunately, limited. He fails to show the same breadth of view in dealing with the efforts of rulers and of society as a whole, to vindicate the rights of society against anarchy, as, for instance, in the reference to "society cherishing the thought that anarchism may be ended by the murder of the anarchist."

The second part is concerned with the struggle between Anarchism and Marxian Socialism. It also opens with a biographical chapter on the life and writings of Marx, and then deals with various phases of the struggle between the two ideals. Under the Newest Anarchism, for instance, the movements covered by the term syndicalism are dealt with. By the Oldest Anarchism, again, is intended the anarchy or lawlessness of powerful individuals or classes, as instanced by the feudal rights of private war. The author argues, on the one hand, that the consummation of the ideas of Bakounin and Proudhon would lead inevitably to a return to such a system. On the other he puts forward the suggestion that, as in the case of some "extra-legal police agencies" in the United States, resort is beginning to be had to modern forms of this anarchism to resist the growing strength of the working classes. His evidence of this strength causes the author to conclude on an optimistic note in a final chapter entitled "Visions of Victory." The book is worth reading not only for the actual treatment of its facts, but for the point of view which it presents. N. B. DEARLE

Waste. By the Committee on the Elimination of Waste in Industry of the Federated American Engineering Societies. (Published by the Societies, the McGraw-Hill Book Company, sole agents: New York and London, 1921. Pp. xi + 409.)

THE problem of waste in industry presents a wide and, to a great extent, an uncharted and unexplored field. The present study is modestly described as comparable to "the preliminary assay of a mine, to the first pencil drawings of a new machine"; but in it the Committee have done a big piece of necessary work, by laying down general lines for study, and elucidating the various problems to be solved. The object was to carry out through highly skilled investigators a rapid intensive study of a few typical plants in some of the chief industries. Six in all were dealt with—building, metals, textiles, men's clothing, boots and shoes, and printing. How thorough the work was may be judged from the *questionnaire* prepared for the investigators, which runs to just on eleven closely printed pages.

The book opens with a brief discussion of the Sources and Causes of Waste and Recommendations for their removal. In this the Committee gives a valuable analysis of the problem, and a well-thought-out series of definitions. No doubt additions and corrections will be made to both as the inquiry proceeds; but the necessary foundations are excellently laid. Waste is classified as due to low production caused by faulty management; interrupted production of idle men, plant or materials; intentionally restricted production, whether by employers or employees; and lost production from ill-health and similar causes.

The second and third parts of the book follow out the workings of these influences in some detail. The former, which consists of the "engineers' field reports," describes the conditions in each industry investigated. The third part reports generally on the chief individual causes of waste in all the industries. An interesting attempt is made to calculate the proportion of waste attributable to the different factors—management, labour, and "outside contacts"; and it may be noted that by far the largest proportion is held to be due to the first, whilst the responsibility of outside contacts is somewhat less than that of labour.

Whilst, therefore, the investigation set out primarily to learn what there was to learn, it has resulted in far more. For it has produced much that will help directly to solve the problems of waste, and has put much information at the disposal of the future inquirer. The Societies and the Committee, therefore,

deserve the thanks both of economics and of industry; and it is much to be hoped that some similar investigations will be set on foot in this country. For a great opening seems to be offered, in certain industries at least, for work on these lines by Joint Industrial Councils.

N. B. DEARLE

NOTES AND MEMORANDA

STATISTICS OF EXTREMELY DEPRECIATED CURRENCIES

CANNAN has shown in a recent article [1] that when a currency becomes extremely depreciated it is no longer true that the elasticity of demand is equal to unity: the demand becomes more inelastic. Statistical material exists for testing this conclusion, and the results are of some interest.

Let Q be the amount of money in circulation,
P be the value of the unit in an invariable standard (provisionally, say, in gold),
$T = PQ$ be the total value of the currency.

Then the elasticity of demand, e, is by definition

$$e = -\frac{P}{Q}\frac{dQ}{dP} = -\frac{d \log Q}{d \log P}.$$

$$\therefore \log \frac{P}{Q_0} = -\int_{P_0}^{P} e \, d \log P$$

If e is not constantly unity, let us assume as a first approximation that it has some other constant value. Then—

$$\log \frac{Q}{Q_0} = -e \log \frac{P}{P_0}$$

or

$$\frac{Q}{Q_0} = \left(\frac{P}{P_0}\right)^{-e}$$

whence

$$\frac{T}{T_0} = \left(\frac{P}{P_0}\right)^{1-e} = \left(\frac{Q}{Q_0}\right)^{\frac{e-1}{e}}$$

Now when a Government issues fresh currency dQ to its subjects, it extracts from their pockets the value PdQ, so that the total value obtainable by this method is $\int_{Q_0}^{Q} PdQ = V$ say. Then—

$$V = \int P_0\left(\frac{Q}{Q_0}\right)^{-\frac{1}{e}} dQ = \frac{P_0 Q_0^{\frac{1}{e}}}{1-\frac{1}{e}}\left[Q^{1-\frac{1}{e}}\right] = \frac{P_0 Q_0}{1-\frac{1}{e}}\left\{\left(\frac{P}{P_0}\right)^{1-e} - 1\right\}$$

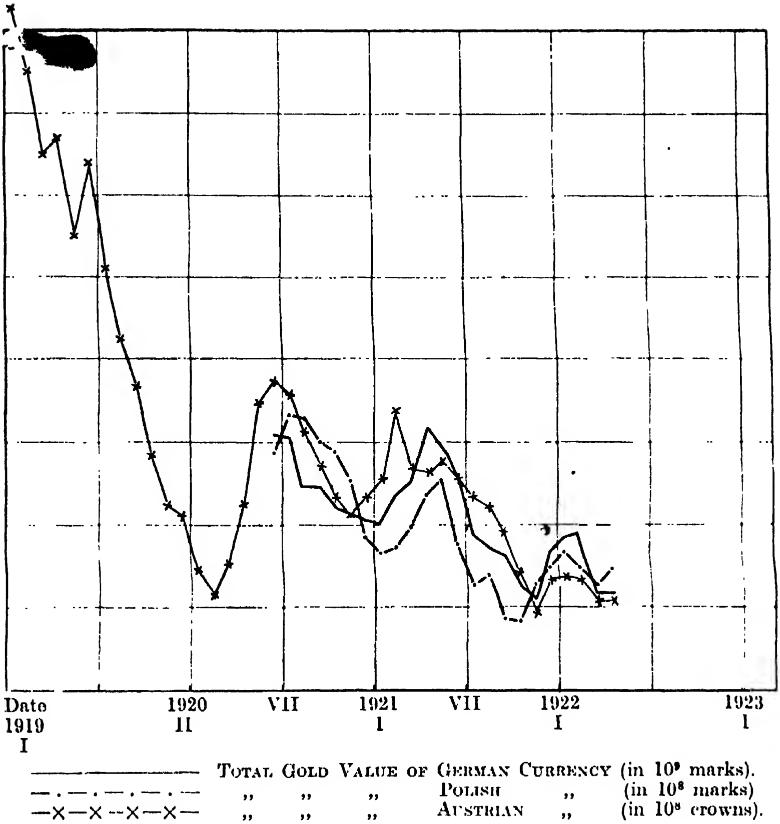
If $e = 1$, V becomes infinite when P is diminished indefinitely, which, of course, is equivalent to a proof that e cannot keep up the value unity. If e is notably less than unity the situation is very different; for, in the limit,

$$\frac{V}{T_0} = \frac{e}{1-e}.$$

[1] *Economic Journal*, XXXI, p. 460.

So that if $e = \frac{3}{4}$, $V = 3T_0$, and the most that Government can acquire by inflation is three times the normal value [redacted] currency (*i. e.* its value when not depreciated).

	Germany.			Poland.			Austria.		
	Exchange (% of par).	Notes in circulation (10^9 marks).	Gold value (10^9 marks).	Exchange %.	Notes (10^9 marks).	Gold value (10^8 marks).	Exchange %.	Notes (10^9 crowns).	Gold value (10^8 crowns).
1919 I	49·2	33·65	16·56						
II	43·4	34·52	14·98						
III	35·8	36·33	13·00						
IV	35·5	37·73	13·39						
V	28·2	38·91	10·97						
VI	30·5	41·91	12·78						
VII	24·8	40·99	10·17						
VIII	21·3	39·98	8·52						
IX	17·8	41·31	7·35						
X	13·5	42·14	5·70						
XI	10·2	43·89	4·48						
XII	8·7	48·57	4·23						
1920 I	5·88	49·5	2·911						
II	4·33	52·8	2·286						
III	5·28	57·9	3·057						
IV	7·42	60·6	4·497						
V	11·22	61·6	6·911						
VI	11·15	66·6	7·126	2·643	21·73	5·74	3·632	16·97	6·16
VII	10·56	67·9	7·170	2·516	26·31	6·62	3·272	18·72	6·12
VIII	8·84	70·4	6·223	2·119	31·09	6·56	2·448	20·05	4·91
IX	7·33	73·8	5·410	1·815	33·20	6·01	2·211	22·27	4·92
X	6·15	75·3	4·631	1·505	38·46	5·79	1·752	25·12	4·40
XI	5·53	77·0	4·258	1·172	43·24	5·07	1·540	28·07	4·32
XII	5·77	81·1	4·679	0·758	49·36	3·74	1·343	30·65	4·12
1921 I	6·51	78·3	5·079	0·605	55·08	3·33	1·170	34·53	4·04
II	8·56	78·5	6·720	0·549	62·56	3·44	1·234	38·35	4·73
III	6·72	79·9	5·369	0·533	74·09	3·95	1·224	41·07	5·03
IV	6·60	80·7	5·326	0·546	86·76	4·74	1·402	45·04	6·31
V	6·82	81·2	5·538	0·537	94·58	5·08	1·276	45·58	5·82
VI	6·07	84·3	5·117	0·344	102·7	3·53	1·036	49·68	5·15
VII	5·46	86·0	4·696	0·219	115·2	2·52	0·695	54·11	3·76
VIII	5·01	88·1	4·414	0·209	133·7	2·79	0·588	58·53	3·44
IX	4·09	94·2	3·853	0·112	152·8	1·71	0·468	70·17	3·28
X	2·88	99·1	2·854	0·089	182·8	1·63	0·275	90·90	2·50
XI	1·67	108·5	1·812	0·123	207·0	2·55	0·182	120·6	2·19
XII	2·15	122·2	2·627	0·130	229·5	2·98	0·188	174·1	3·27
1922 I	2·19	123·6	2·707	0·139	239·6	3·33	0·1608	227·0	3·65
II	2·04	128·2	2·615	0·121	247·2	2·99	0·1431	259·9	3·72
III	1·52	139·6	2·122	0·100	250·7	2·51	0·0753	304·1	2·29
IV	1·456	149·8	2·181	0·110	260·6	2·89	0·0659	346·7	2·29
V									
VI									



The values of P and Q are published in the Monthly Bulletin of Statistics of the League of Nations: the values for Germany, Poland, and Austria have been tabulated and T worked out, and the results are shown on the accompanying graph.

The first point to be brought out is that the depreciation has been markedly periodic; *i. e.* it is affected by psychological influences which show a period – of about ten months. Instead of the values of P depending only on the values of Q at the moment, they are affected by anticipation of what Q is likely to become; affected, of course, through the mechanism of speculative purchases and sales. Optimism prevailed about the middle of 1920, in the spring of 1921, and the beginning of 1922, with well-marked pessimistic minima between: the period being, in the case of all three countries, very closely ten months. The semi-amplitude of the oscillations is round about 25 per cent. of the mean.

The data are not worth analysing by any very elaborate mathematical method, but the following approximatio[illegible] serve to determine the magnitude of e.

Taking the case of Austria, the cycle extending from 1920 VI to 1921 IV has its mean date as 1920 XI and mean T = 488 (unit 10^6 gold crowns); it is succeeded by a cycle whose mean date is 1921 IX and mean T = 381. The values of Q at the two mean dates are 280·7 and 541·1 respectively, so we should have

$$\frac{381}{488} = \left(\frac{541 \cdot 1}{280 \cdot 7}\right)^{\frac{e-1}{e}}$$

which yields $e = 0{\cdot}73$.

Treated in the same way, and over the same period, the Polish figures yield $e = 0{\cdot}67$. In both these cases the value of P was of the order of 1 per cent. or less of the original (or par) value of the money.

German currency has not been depreciated to nearly the same extent, the range in the period considered being between 10 per cent. and 1 per cent. of par. Nevertheless it yields an even lower figure for e—in the neighbourhood of 0·5. The mark has certainly been depreciated by other than purely commercial influences.

R. A. LEHFELDT

The University, Johannesburg,
August, 1922.

THE ECONOMIC BOXES

A Rejoinder [1]

BY the courtesy of the Editor and of Professor Pigou I am allowed to append a few notes and comments. My object having been to elicit a reply, I am content to have succeeded and so will be brief. The preliminary sparring before the big blows are hit I will pass over, without denying that so good a sparrer as Professor Pigou "gets in." Neither he *nor* I *think* very highly of "pure" economic knowledge which is likely to remain "pure" indefinitely. We agree that a mere study of implications which is fully justifiable "in the kingdom of pure mathematics," or a mere study of facts in succession which may be justifiable in the kingdom of history, would not be justifiable as the main business of economics. I cannot tell him—nor in a similar case, I should imagine, could he tell himself—how much of my rudeness towards the boxes is due to (a) their emptiness and (b) their possible use-

[1] See Professor Pigou's article printed above.

lessness if filled. The emptiness is ground common to us both; [redacted]ortant fact, I think.

A word about "complexes." In form Professor Pigou's reference to them is only a sparring point, but I think it has importance. I admit the anti-commodity complex: Professor Pigou has found the right name for my complaint. I know that the term commodity is used in order that it may cover hats and gold watches and onions, and I constantly suspect that the user does not know whether the propositions which he is affirming as to commodities are true of either onions or gold watches or hats. The oftener he does it without an illustration the stronger grow my suspicion and my complex. The cure—in a friend's hands—is a series of illustrative footnotes.

This leads to a point of more general interest. "Dr. Clapham appears to hold that, provided as boxes they cannot be filled, it is self-evident that they can serve no purpose"—" as instruments in the construction of a realistic economic science." "In that I venture to suggest . . . that he has, in fact, misunderstood altogether the nature of the work that he is belittling." Professor Pigou then goes on to show the importance of the laws of returns, or some equivalent, in the whole theory of value, and says that to take them out of their setting is "a very perverse proceeding." I see no perversity in criticising part of a theory; but I was at first disposed to search for empty boxes in more parts than one. This space forbade. I have a fear lest a theory of value which should prove permanently unable to state of what particular and individual values some of its more important conclusions were true might in the long run be neglected by mankind. I fear also that a too constant thinking in terms of commodities may tend to blind "analytics"—to use the nickname as to whose imperfect applicability Professor Pigou and I are in fact at one—to this danger. It was solicitude for the theory of value, not indifference to its complex beauties, which urged me on.

Professor Pigou's argument about the negative use of the boxes, even if empty, is decisive within its range. It is one of the considerations which I had overlooked and which I am glad to have pointed out. "Dr. Clapham will hardly deny that science may help practice by exposing the falsehoods of charlatanry as well as by itself discovering truths." He will not; but he is very anxious that economic science should be able to do more, and that, where and in so far as it is at present unable to do more, it should make the fact quite clear.

I believe I was aware of the "intricate collection of little cases inside" my big boxes; although I seem to have written s[illegible]lessly that Professor Pigou can tell people that I "evidently suppose" that "analytics" are only interested in the question whether hats or onions are in big box D.R. or in big box I.R. My natural, and not unscientific, wish was to learn about the big boxes first. When I know that my Botany tops are in I.R. it will be time enough to examine further. Professor Pigou will find a reference to tops which shows that I was not entirely blind to the subdivisions of the big boxes, though I know well enough that he and not I should be entrusted with the labelling of some of the little ones. He has shown, that had I "realised what the issue really was," I could have made this part of my argument much stronger. I always thought I could.

I accept the rebuke, whose point is sharpened by references to ready-made clothes and "a certain *naïveté*." My statements in the section criticised were exceedingly incomplete. I was not writing a treatise. I was merely anxious to indicate that we have had hitherto, even from the very greatest economists, rather sketchy indications of the probable uses of the big and little cases, when filled. I was not anxious to suggest that it is Professor Pigou's business to teach a brewer to brew; but I think it may be his business, when he says that such and such social consequences will result from a tax on, or a monopoly in, commodities of such and such a type, to be able to tell the brewer whether in this context "commodity" covers beer as well as hats, onions and gold watches.

Professor Pigou does not say whether or not inventions are to be included in that general progress in the efficiency of an industry which tends towards increasing returns. I assume, therefore, that he agrees with me that exclusion will condemn the boxes to perpetual emptiness. His suggestions towards filling the boxes are much scantier than I had thought possible. I made my treatment a trifle crude partly in the hope of provoking someone to say—Give me these and those facts and series of statistics about, say, pig-iron and I will box it for you. I had anticipated that the facts and statistics demanded might be, by common consent, at present unprocurable; but I had hoped that they might be specified. And now I am paid with a cheque drawn *on the bank of an unborn Jevons.* Can no one give us more current coin? *I do not deny that a second Jevons may do this* thing; but I do not think that Professor Pigou's reply has given him much help.

Finally, I do not agree that discussions about method are "time wasted in quarrelling," even if, as Professor Pigou suggests, we may have an imperfect understanding of one another's methods. Public discussion elucidates the methods and improves the understanding. There has for some years been too much abstention from it among economists, due in part to a certain very natural piety. Things are constantly said in conversation which never get into print, and we need, as one of us would say, to bring inside and outside opinion into line. Mounted on the smoothly running machine which he handles with such incomparable skill, Professor Pigou may be a trifle impatient of suggestions that a rather differently constructed model might have a longer and more useful life; but that is no reason why the suggestion should not be made, even by a much less expert driver.

J. H. Clapham

Current Topics

At the meeting of the British Association last September, the discussions in which Section F was joined by other sections proved particularly interesting. Before an audience composed of mathematicians and agriculturists, as well as economists, Sir William Beveridge developed the theory of *Weather Cycles* which he had propounded in the Economic Journal. Professor H. H. Turner, referring to astronomic analogies, opined that extensive observations such as those which Sir William Beveridge had compiled were adequate to afford indications of periodicity; which it was desirable to confirm by discovery of reasons. Mr. Udny Yule, insisting on the dynamic character of economic phenomena, desiderated a law representing the movement of prices and production. As often in physical dynamics, the law might be periodic; the fluctuation being explicable by the psychology of the business man.

The possibility of increasing the food supply of the nation was discussed by the economic and agricultural sections in conjunction. Sir John Russell, Director of the Agricultural Experimental Station at Rothampsted, enumerated various ways in which our crops might be increased. Mr. C. S. Orwin, of the Agricultural Institute, Oxford, showed that increase which was possible might not be profitable, owing to the law of diminishing returns, which he illustrated by remarkable statistics and diagrams. Professor Somerville pointed out that

grass lands admitted of the largest increase of yield consistent with profit to the farmer. Professor Cannan recalled attention to the subject. The food supply of the nation depended largely on the possible increase of exportable produce in foreign countries. Practical agriculturists should remember that the law of diminishing returns had been discussed a hundred years ago by the economist sitting in his proverbial arm-chair.

Among the other proceedings of Section F may be noticed papers by Mr. J. L. Cohen on the future of unemployment insurance, by Professor J. G. Smith on municipal markets, by Mr. Hamilton Whyte on the effect of war conditions on the stock market. Professor Bowley dealt with the relations between wholesale and retail prices in a paper which has been published in *Economica*. Mr. Bickerdyke discussed the possibility of controlling industrial fluctuations. "Long-period stabilisation," he said, "on the lines of Irving Fisher's scheme, does not go far towards checking ordinary fluctuations of good and bad trade." Miss A. Ashley compared the English and Scottish Poor Law in relation to the able-bodied, and deduced some practical conclusions. Miss A. Reynard analysed the psychology of the business man and that of the worker. The President's Address is reprinted in the present number of the ECONOMIC JOURNAL.

In the *Order* under *The Safeguarding of Industries Act* quoted by Captain Wedgwood Benn in his article published in the *September* JOURNAL (bottom of p. 409), there is a misleading misprint which needs to be corrected, the word "except" having slipped out between the words "cross-examined" and "by." The quotation from the *Order* should have read as follows:—

"A witness whom the Committee desire to hear may, if he wishes, be accompanied by solicitor or counsel who may address the Committee on his behalf, but no witness shall be examined or cross-examined *except* by the Members of the Committee."

RECENT PERIODICALS AND NEW BOOKS

Journal of the Royal Statistical Society.

JULY, 1922. *Discussion on the Value of Life-Tables in Statistical Research.* Opened by M. GREENWOOD. *The Interpretation of Statistics relating to Shipping Casualties.* J. W. VERDIER. *The Goodness of Fit of Regression Formulæ.* R. A. FISHER.

Quarterly Review.

OCTOBER, 1922. *What Labour Wants.* BERTRAM CLAYTON.

Edinburgh Review.

OCTOBER, 1922. *Labour's Disillusionment.* THE EDITOR. The economic harmonies are illustrated by reference to recent writings on Labour.

Fortnightly Review.

SEPTEMBER, 1922. *Public Assistance and National Decay.* J. A. R. MARRIOTT. Estimating the contribution to public assistance from rates and taxes as 133 millions, and referring to Stoddard's *Revolt Against Civilisation*, the writer denounces the present system as financially and morally fatal.

Contemporary Review.

SEPTEMBER, 1922. *The Coalition and the Free Trade Issue.* CAPT. WEDGWOOD BENN, M.P.

Economica.

OCTOBER, 1922. *The Relations between Wholesale and Retail Prices since the War.* A. L. BOWLEY. To find a formula which relates the retail index-number at any date with the wholesale index-number of the same, or of a preceding date, and to forecast the movements of the retail from the wholesale index-number; such are the problems here treated by three methods.

Manchester Guardian Commercial.

Reconstruction in Europe.

Section VI. *Population, Agriculture and Food Supply. The Peasant Revolution in Europe.* Remote causes and consequences, transcending the interests of the hour and even of the age, are here contemplated. Mr. Keynes, who in a previous article had pointed out that the practice of the much-preached virtue of thrift conduced to the growth of population in the nineteenth century, now views with concern the supply of labour depending on conditions which affected the birth-rate many years ago. "A slow but steady lowering in the standard of living may result. The problem of population is going to be the greatest of all political questions. A great transition in human history will have begun when civilised society assumes conscious control of its increase." The philosophical Signor Croce is averse to statical Utopias; and does not formulate a general theory of population:—"this, or that attitude [towards increase] is justified only in the moral conscience as a moral agreement with oneself." Prof. Hahn of Freiburg makes a more definite suggestion, when, referring to plans which we should

describe as the endowment of parenthood, he maintains that the principle of higher wages for larger families must be adopted by international agencies such as the League of Nations in determining the distribution of [illegible] wealth and raw materials. Dr. Brownlee, viewing with alarm the [illegible] of population on the resources of English soil, advocates regulated emigration, but deprecates the restriction of births. Prof. Pribram of Vienna recommends the emigration from Austria of now superfluous officials whom other countries might accept if accompanied with skilled Austrian artizans. Baron Keikishi Ishimoto of Tokyo holds that the only way in which Japan can meet the difficulty of population growing faster than supply of food is by the restriction of births. "Birth control is now the most important question of the world." These prescriptions are based upon diagnosis of statistics showing the movement of population in many countries. Prof. Rist dwells on the decrease of the French population during the War and the slowness of its subsequent increase. At present rates of increase it will take France four more years to regain her population of 1913; while in less than ten years Germany will have within her narrowed boundaries as large a population as in 1914.

The second part deals with the food supply in different parts of the world. In the third part Mr. L. B. Namier describes the Agrarian revolution in Eastern Europe as a retrograde movement. "There is no room for a leisured class of independent means and of an independent spirit." "Perfect theocracies may yet arise." The economic consequences of land reforms or revolutions in several countries are described by different writers. Mr. Louis Levine compares the tremendous losses of life, wealth and culture due to the Revolution with the gain to the peasants through the acquisition of land, the abolition of debt, and a new mentality.

The seventh section deals with *Railways, Coal, Iron, Steel, Engineering*.

The problem of *Reparations* is discussed in the eighth section. Mr. Keynes recommends a moratorium up to the end of 1923, and the discontinuance of the Reparations Commission, of the deliverance of coal to the French, and of the occupation of German territory. He puts the amount to be claimed from Germany at 40 milliards of gold marks, due in 1935. An annual payment of 2 milliards will discharge this debt by 1935. But if only $1\frac{1}{2}$ milliards is annually forthcoming, then the debt will not be wiped out till about 1950. An arrangement is proposed by which, if German trade and credit should improve more than is expected, a larger contribution may be obtained. He replies to critics who suppose that economic progress will be as rapid in the future as before the War. Other opinions are expressed; almost as many as the States which the several writers represent. A particularly interesting contribution is formed by a symposium in which six professors of different nationalities discuss the question: "How much can the Allies induce Germany to pay with advantage to themselves?" Prof. Cannan derides the suggestion that it would not be to the advantage of the Allies to receive a large payment. But he doubts whether they can "induce" Germany to make large payments over long periods. He recommends making a good bargain for immediate payment in return for guarantees of peace and retirement from occupied territory. To the question, "How much?" Prof. Gide replies: As much as was agreed at the London and Spa Conferences, viz., to France, 52 per cent. of 132 milliards of gold marks, *i.e.* 68 milliards. He allows some reduction in respect of "pensions" and exaggerated contractors' profits. He deplores that French Protectionists oppose the acceptance of German imports. The "avidity of French manufacturers and speculators" prevented the reparation of the devastated areas by German work. Still, as a German had said during the War, "with suitable methods the payment of a war indemnity of any magnitude is possible." Would not a suitable method be one that is adopted by the Coal Commission which receives and distributes coal without prejudice to French interests? Prof. Andréades insists on the need of monetary stability. He would offer a new hundred-mark note in the place of two or more of those now current.

Labour Gazette (Bombay).

The Gazette, published monthly by the Labour Office Secretariat, Bombay, has well fulfilled, during the first year of its existence, the purpose announced in a foreword to the first issue (September, 1921) by the Governor of Bombay: "the preparation of statistics

in simple forms, enabling not only employer and employed, but also the press and the public, to take a better-informed interest in labour problems." The changes in the cost of living from month to month are exhibited by a carefully constructed index-number. There was, for instance, a fall last August from 160 in July to 159, compared with 100 in July, 1914. There is a history of industrial disputes in the Presidency, and some account of documents relating to Labour in different parts of the world. For example, the Report of Wages Inquiry in Trinidad is analysed in the current number of the Gazette; drawing conclusions from Family Budgets respecting the Cost of Living and a minimum wage.

International Labour Review (Geneva).

SEPTEMBER, 1922. *The Eight-hour Day and the Problems of Overtime in Germany.* DR LEYMANN. *The Workers' Educational Association of Great Britain.* A. MANSBRIDGE.

OCTOBER. *The Law of Collective Bargaining in Germany.* DR F. SITZLER. *Workers' Education in Belgium.* H. DE MAN. *The Three-shift System in Iron and Steel.* The adoption of the system, though general in Europe, is so recent that investigation has not elicited definite conclusions as to the effect on output and the welfare of the worker.

NOVEMBER. *Labour Legislation in Greece.* PROF. A. ANDREADES. Most of the measures recommended by the Washington Conference had been already adopted by Greece; which is the more creditable, considering that Greece is not highly industrialised. *The Campaign against Unemployment in Sweden.* E. G. HUSS.

The Quarterly Journal of Economics (Cambridge, Mass.).

AUGUST, 1922. *Land Values in New York City.* G. B. ARNER. Much of the increase in the value of vacant land goes in contributions to the revenue of the City. Holding vacant land is not a profitable investment. *A Theory of the Rate of Wages.* W. H. HAMILTON. *Skill.* ANNA BEZANSON. The definition of skill in industry includes subtle factors of shop lore and experience that are commonly overlooked. *Intensity of Cultivation.* HIBBARD. A study of the changes in the margin of agricultural production, which attend a change in the price of the product or in the cost of production.

The American Economic Review (Cambridge, Mass.).

SEPTEMBER, 1922. *A Popular Theory of Credit applied to Credit Policy.* ANNA YOUNGMAN. *Commercial Importance of Russia.* ALONZO E. TAYLOR. *The Circuit Flow of Money.* WILLIAM T. FOSTER. How little we know about money is shown by the continuance of effective consumers' demand during the depression in 1921. If we knew more, the evils of expansion and contraction might be more controllable.

Political Science Quarterly (New York).

SEPTEMBER, 1922. *The New Normal in Foreign Trade.* H. R. MUSSEY. The United States will probably increase its foreign investments on the lines of other highly developed countries, but avoiding their faults. *Germany's Industrial Parliament.* E. FRANKEL.

Journal of Political Economy (Chicago).

AUGUST, 1922. *Britain's Economic Outlook on Europe.* J. A. H[illegible] Unemployment has reached the figure of two millions; [illegible]r of British capital and labour has been idle for a year; our exports are deficient by £100,000,000; work-people claim a larger share of a reduced product. Remedy is sought in policies which identify the interests of employers and employees. The author prescribes also for expansion of markets. He hopes for a closer international control of finance.

OCTOBER. *English Agriculture since* 1914. *I.* R. LENNARD. An accurate record of doings during a troubled period, from which arguments cannot be drawn for or against Government control in normal peace-time. One conclusion indeed may be drawn: Maximum prices lower than market prices tend to impair quality. *The Iron and Steel Industry of Japan.* A. BERGLUND. *Dumping in International Trade. I.* JACOB VINER.

The Yale Review (New Haven, Conn.).

OCTOBER, 1922. *War Debts.* R. C. LEFFINGWELL. A general settlement bringing peace and disarmaments, balanced Budgets and removal of trade barriers, is needed by Europe, and might be promoted by America. *The Famine and the Bolsheviks.* EMMA PONAFIDINE. A lurid picture—illustrated by the case of an estate on which the writer had lived—of the ruin of agriculture caused by the Bolshevik regime.

Bureau of Labour (Washington).

Wholesale Prices, 1890–1920. The index-number based on all commodities shows a rise from 100 in 1913 to 245 in 1920. The different groups, food, clothing, fuel, etc., show corresponding growths.

Journal des Economistes (Paris).

OCTOBER, 1922. *Aberrations Germanophiles.* YVES GUYOT. *La récupération de taxes sur les bénéfices de guerre.* FERNAND-JAE. *Le controle ouvrier sur la gestion des entreprises.* G. DE NOUVIM. "Industrial democracy" is denounced.

Revue d'Economie Politique (Paris).

JULY–AUGUST, 1922. *Le change et les prix.* M. OLIVIER. *Contribution aux thémes du capital et du revenu* (suite). CH. BODIN. *Les questions financières à la conference de Gènes.* R. PICARD. *La question monétaire dans le territoire de la Sarre.* J. PRIOU. *Le nouvel emprunt forcé du gouvernement grec* (suite). E. J. TSOUDEROS.

SEPTEMBER–OCTOBER. *Le contrôle ouvrier sur la production.* G. PIROU. Most of the experiments in Joint Management (*co-gestion*)—in Russia, America, England, Italy—are not encouraging. The recent tentatives in Germany are more promising. *Les banques d'émission scandinaves pendant la guerre.* E. SOMMARIN. The writer criticises the proceedings of the Northern Banks with the authority of one who is Secretary of the Swedish Banking Commission as well as Professor in the University of Lund. *Le problème monétaire et la théorie du Professeur Cassel.* C. J. GIGNOUX. *Le Bolchevisme à la lumière des précédents historiques.*

J. DELEVSKY. The immediate fall of the Soviet Government is not suggested by historical parallels. Such were the long struggle between rich and poor in ancient Greece; the Communism introduced into Persia by Mardak in the fifth century A.D., which flourished for some years, till suppressed by Chosroes.

Jahrbücher für Nationalökonomie (Jena).

JULY, 1922. *Das Geltungsproblem der sozialen Werturteils.* HERBERT SCHACK. The Socialistic criterion of value (*Wertmasstab*) as an "empirical-analytic" or "transcendental-analytical" principle, and the practical significance of the Socialistic ideal are among the topics.

AUGUST. *Das Geld ohne Eigenwert und die Preislehre.* OSKAR ENGLÄNDER. On the theory of a money not possessing intrinsic value. *Das Bodengesetz.* DR. W. ROBECK. A mathematical theory of diminishing returns in agriculture.

OCTOBER. *Zur Lehre von der Enstehung der sozialen Klasse.* G. ALBRECHT. *Grundlage der Preis-und-Lohnbildung.* RIEDENAUER.

Archiv für Sozialwissenschaft und Sozialpolitik (Tübingen).

MAY, 1922. *Deutschlands finanzielle Leistungsfähigkeit jetzt und kunftig.* ALFRED WEBER. *Deutscher Nationalismus und deutscher Sozialismus.* PROF. KARL PRIBRAM. *Sozialistische Rechnungslegung.* DR. CARL POLANYI. *Das Gesetz von abnehmenden Bodenertrag.* DR. HANS NEISSER. *Der Kriegs-problem und die Marxistische Theorie.* DR. GERHART LÜTKENS.

AUGUST. *Zur lehre von der Klassenbildung.* ROBERT MICHELS. A survey of various principles of division by which society may be classified—wealth, expenditure, work, etc. *Die Gruppe als Ideetrager.* DR. S. CRACANER. A metaphysical study in which the "Group I" is contrasted with the "Individual I." *Die logische Theorie der historischen Kulturwissenschaft von Max Weber und in besonderen sein begriff des Idealtypus.* A VON SCHELTING.

Weltwirtschaftliches Archiv (Jena).

JULY, 1922. *Zur frage der Beteiligung der Arbeiter am Unternehmergewinn.* PROF. KARL DIEHL. On profit-sharing, in the light of theory and experience. *Die dritte internationale Arbeitskonferenz in Genua.* DR. W. ZIMMERMANN. *Zur ideologie des russischen kommunismus.* DR. H. VON ECKARDT. Such is the mentality of the Russian Communists that they have put an end to Socialism in Russia.

Zeitschrift für Volkswirtschaft und Sozialpolitik (Vienna).

BAND II, 4-6 Heft. *Der Streit um die Möglichkeit und das Wesen der Gesellschaftslehere.* O. SPANN. *Die Kriegwirtschaftlichen Organisationen und Zentraalen in Osterreich.* H. WITTEK. *Auf dem Wege zur Kunft.* O. WITTMAYER. On industrial organisation.

De Economist (La Hague).

OCTOBER, 1922. *Metalissme en á-metallisme.* PROF. DR. A. VERRIJN STUART. The trend of theory and circumstance is towards a non-metallic standard; which, however, is not to be expected just now.

Giornale degli Economisti (Rome).

SEPTEMBER, 1922. *Il porto di Genova.* EPICARMO CORBINO. *Sul problema della contra-Assicurazione.* PACIFICO MAZZEI.
OCTOBER. *Inflazione monetarie e corso dei Cambi.* MARCO FANNO. *Linee di navigazione sovvenzionate.* G. MARCHETTI.

La Riforma Sociale (Turin).

SEPTEMBER–OCTOBER, 1922. *Projetto di Unione-Italo-Austriaca.* E. GIRETTI. The project of a "commercial union" between Austria and Italy is not advisable in the present state of politics and politicians. *I crisi Risiera e l'esportazione dello sbramato.* DR. DE SANTIS MICHELE. On the exportation of rice not divested of the husk ("glume") (as Protectionists demand).

Scientia (Milan).

NO. CXXIV., 8. *Les problèmes des prix et du capital par rapport à la question de la socialisation.* T. E. GREGORY.

NO. CXXV., 9. *A Suggested Limitation of Capitalist Property.* J. A. RYAN.

NO. CXXVII., 11. *La contribution des differents peuples au progrès de la science économique.* A. LORIA. England, with Ricardo, is placed first. The works of subsequent English economists are but elaborations of his theories. Even the treatise of Marshall is mainly a systematic exposition of Ricardian theory; while "the works of Cannan, Pigou . . . Nicholson, Keynes, Withers, and even the socialist writers such as Webb, Cole, Hobson, etc., are but monographic elaborations of the Ricardian system." As for the French, American and other national systems, compared with the English they are like planets now revolving about the sun, though once they may have had independent motions. All systems are but temporary. *L'abolition du salariat.* G. D. H. COLE. The worker (1) should be secured against unemployment; (2) should determine the ends to which his work is directed—*e.g.*, whether to produce necessaries or articles of luxury; and (3) should enjoy "complete autonomy" in the management of the industry.

Problemi Italiani (Naples).

AUGUST, 1922. *Economie a imposte.* A. DE VITI DE MARCO. The subject is treated by the Roman Professor with special reference to the condition of Italy, which is described as suffering from administrative parasitism, oppressed by a bureaucracy as exacting as that which precipitated the fall of the Roman Empire. Some resistance may be offered by the *League of Taxpayers.*

Revista Nacional de Economia (Madrid).

VOL. XII., NO. 37. *Empleo de los beneficios de la guerra realizados par España.* ANDRÉS BARTHE. An estimate of the gains realised by Spain from transactions with foreigners during the War. *El malestar del mundo después de la paz.* JUAN GUIXE. A gloomy picture of present conditions; darkened by the prospect of a future war between France and Germany; which will not be averted by the League of Nations, that outcome of "Ideologia Wilsoniana."

NEW BOOKS

English.

BANERJEA (PRAMATHANATH). Fiscal Policy in India. London: Macmillan. 1922. Pp. 256.

Charity Organisation Society. The Prevention and Relief of Distress. A handbook of information respecting the Statutory and voluntary means available for the relief of distress and the improvement of social conditions. Being Sir Charles Loch's "How to Help Cases of Distress" revised, rearranged and brought up to date for the Charity Organisation Society. London: King. 1922. Pp. 140. 2*s*. 6*d*.

[To be reviewed.]

CLARKE (JOHN J.). Social Administration and the Poor Laws. London. Pitman. 1922. Pp. 364.

[To be reviewed.]

CUMBERLAND (M.) and HARRISON (RAYMOND). The New Economics. London: Palmer. 1922. Pp. xii+145. 6*s*.

[On the lines of Major Douglas' "Credit Power and Democracy."]

DE MONTGOMERY (B. G.). British and Continental Labour Policy. London: Kegan Paul, etc. 1922. Pp. 575. 21*s*.

[To be reviewed.]

DOUGLAS (C. H.). The Present Discontent and the Labour Party and Social Credit. London: Palmer. 1922. 1*s*.

[Contains a reply to the Labour Party's criticism of the author's new age credit scheme.]

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[The author is Vice-Principal of the Teachers' College, Auckland.]

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[The author is Professor of Economics at Lahore.]

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[The author is Lecturer in Economics and Economic History in the University of Birmingham.]

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[The syllabus for the Intermediate Examination at London University formed the framework of this volume, which is intended "primarily as a handbook for candidates."]

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[Directed against Marx's materialistic interpretation.]

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[A survey of Japanese war-loans, mostly foreign, and an estimate of their economic effects, mostly deleterious.]

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[Professor Harald Westergaard, who has acted as editor, regards the author's method of investigation as a guarantee of his accuracy.]

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[The Webb-Pomerene and Edge Acts, intended to promote American foreign trade, are explained and applied.]

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[The work translated is the fourteenth edition of a well-known treatise, of which the first edition appeared in 1875. Professor Graziani, the editor, has made some judicious additions to the original, and has brought the bibliography up to date.]

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[Beginning with primitive China and ancient Greece, the learned Professor—sometime of the University of Moscow—traces the development of economic ideas down to the Modern Co-operative School. He differs from ordinary text-books in directing special attention to the less known writers.]

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[The writer, formerly a professor at the University of Petrograd, discredits the reforms announced in Tchicherin's Memorandum of March 1922.]

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[A lecture delivered at the University of Hamburg last August. Among the pre-requisites of reconstruction the lecturer places discipline as well as freedom. He looks for a new economy which, resting on a broad democratic basis, but retaining the wage-system, puts at the head the truly creative spirits.]

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[Reviewing past experience, the slavery of the ancient world, the medieval regulations and modern times, the distinguished writer argues that without freedom progress in mechanical improvements is not to be expected.]

JÖHR (DR. ADOLF). Die Zukunft der Valuten. Zurich: Orell: Füssli. Pp. 68.

[The writer is Director of the Swiss "Kreditanstalt."]

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[A careful description of various matters relating to international trade: Weights and Measures, Bills of Exchange and other instruments of credit; money markets in different countries, etc. The author is a "dozent" in the technical "Hochschule" of Vienna.]

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[Four speeches on the problem of Reparation; the last words of the murdered Minister.]

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[The sociological cost of protectionism, the share of workmen in management, experiments in profit-sharing, are among the topics covered by a secondary title.]

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